



**The
American Association
of
Psychiatric Services for Children**

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54.

FINAL REPORT

DEVELOPMENTAL REVIEW

in the
EPSDT PROGRAM
Contract # HCFA 500-77-032

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1979

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Conducted for the Health Care Financing Administration
by the
American Association of Psychiatric Services for Children

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OVERVIEW OF THE PROJECT ACTIVITIES

This is the report of the third year of funding provided to the American Association on of Psychiatric Services for Children for the purpose of developing recommendations regarding the developmental assessment component of EPSDT services.

At the start-up of the first year of the contract, the Health Care Financing Administration was faced with the legislative mandate to screen eligible children for mental defect. Concern about the potentially harmful effect of "labeling" children, combined with concern about the risk that assessment instruments which had been normed on a middle class white population were not appropriate for children for lower class minority cultures, had made the issue of developmental assessment a controversial one. AAPSC was asked to bring together authorities from relevant disciplines in order to address this problem.

Participants at a conference which was convened in 1977 recommended a reconceptualization of the mandate for developmental screening services provided under the EPSDT Program. The Report of the Conference, which has been widely distributed, states:

"It is evident that the development of a child is a process, requiring periodic review to insure that development is proceeding adequately."

The Report continues:

"Thus the term 'Screening' with its connotation of searching for a defect, is less appropriate than is the term "developmental review" Developmental review in the context of a health program has three goals:

1. The promotion of strengths of a child and family to cope with the various tasks of living;
2. The prevention of specific developmental disabilities;
3. Early case finding.

Under the proposed system of conceptualization there is no way in this field to identify precise tests to distinguish between "normal" and "abnormal" children; there are dozens of crucial functions subsumed under the concept of development, since development is not one thing. Developmental review would thus consists of an assessment of these functions rather than the specific diagnosis of a condition. A functional assessment, a profile of strengths and weaknesses; or assets and liabilities, describes the transactions between the child and the world around him in terms of the tasks asked of him and the people significant to his life, in the particular setting in which the child is found, and at the particular time of every developmental review. The outline of assets and liabilities, strengths and weaknesses, is clearly not related solely to the functioning of the child but is defined specifically in relation to the expectations of the important people and institutions in a child's life..."

Following consultation with the Project Officer, the decision was made in FY 78 to organize multidisciplinary working conferences to address two major areas, parent involvement and the training of professionals. A meeting of representatives of minority professional organizations was held. In addition, a committee was formed to make recommendations regarding assessment instruments. The reports of these conferences and committees, which were submitted to HCFA in 1978 served as background materials for the activities of FY '79 which are covered in this report. The names of conference participants in FY 77 and FY 78 and summaries of their recommendations are included in the FY 79 conference

on Continuing Education which follows. (Report, Conference on Continuing Education Issues, Section III)

The organization of this final report is as follows: Following this review of project activities, there is a second section which is the report of the Field Study. This Field Study Report reviews conceptual issues and related research concerning approaches to the evaluation of development in infants and pre-school children. It describes the study sites, the methodology and results of the study, and discusses the findings.

The third portion of this final report covers the Conference on Continuing Education Strategies. The Conference Report includes a copy of the Conference Resolution, which related professional organizations have been asked to endorse, the recommendations of the conference participants, the names of the participants, and the planned dissemination of the Report. As the principal dissemination activity has been an extension of the conference activities, dissemination is included in section three of the report.

A fourth and final section concludes the Report.

PROCEDURES FOR THE ASSESSMENT AND REVIEW OF DEVELOPMENT
A FIELD STUDY

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Study Carried out for:

The Early and Periodic Screening, Diagnosis and Treatment Program
The Health Care Financing Administration

by:

The American Association of Psychiatric Services for Children

Under Contract: HCFA 77-500-0032

INTRODUCTION

This report is an outcome of the efforts of the many professionals who have participated in the three year American Association of Psychiatric Services for Children (AAPSC) Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Project (HCFA 500-77-0032).

From its early mandate to address the screening for "mental defect" component of EPSDT services, the task evolved to that of developing a set of procedures to facilitate the developmental review process which was recommended by the San Diego Conference participants in 1977.¹ As an expression of the major shift from screening for defects to the review and support of the developmental process, two major areas of activity evolved. These were to address training needs ^{2,3} and to articulate the procedures of which the developmental review process is comprised. Conferences on Parent Involvement ⁴ and Minority Issues ⁵ have affected on both training recommendations and on the procedures which are discussed herein.

During FY '78, a committee* with members from the field of education, medicine and psychology was formed to consider recommending specific instruments for use in the developmental review process. The committee agreed that for a number of reasons recommendations about specific instruments for use in the EPSDT Program should not be made at this

*Earladeen Badger, Thomas Boll, Asa Hilliard, Harold Ireton, Sally Provence, Project Director, Alfred Herbert, and Project Advisor, Nancy Stone

time.⁶ Particular concern was expressed about the possible use of paraprofessional staff who had received short courses on the use of a test instrument, but had not had comprehensive training in the field of child development. Assessment instruments were felt to be of value only in the context of a clinical evaluation by a trained professional. In place of the identification of specific instruments for the EPSDT Program, the committee sought to develop a clinical protocol of essential elements for developmental assessment.

From the protocol developed by the above committee, a set of assessment procedures was articulated (Procedures for assessment and Review of Development: PARD. See Appendix A) This is the report of a field study of the use of PARD in rural and urban sites by professionals in the public and private sectors, who currently are providing developmental assessments as a part of services funded under the EPSDT Program.

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I

OVERVIEW OF BACKGROUND ISSUES

OVERVIEW OF BACKGROUND ISSUES

Periodic evaluation of growth and development in a child is a standard health care practice. While the techniques used for evaluating growth are non-controversial, the same cannot be said for the evaluation of development. Literally hundreds of assessment instruments have been developed in recent years, and new ones continue to appear. In health care settings, the use of clinical judgement increasingly is supplemented by the use of a developmental assessment instrument of some type. The mandate to serve millions of children under the EPSDT Program has added momentum to efforts to effectively, efficiently, and rapidly evaluate children's development. The recommendations of the participants at the 1977 AAPSC EPSDT Conference¹ and those of the AAPSC Instruments Committee of FY 78⁶ are consistent with those of many professionals, however, who question the mandate that screening* techniques be applied to the evaluation of the developmental status of infants and preschool children.^{7,8}

*The term screening refers to the use of quick, simple, reliable techniques, capable of a pass-fail interpretation, with large numbers of children.

Although it is beyond the scope of this report to provide an extensive review of approaches to developmental assessment,** some aspects of the subject will be covered in order to place the field study in perspective. Because the assessment procedures which were used in the field study were developed for children under the age of five years, the information which follows relates principally to children between the ages of three months and five years. Not addressed in this report are the physical examination of the child or the vision and hearing screening.

Early interest in formalizing psychological assessments coincided with universal education in Western societies and efforts to identify children who could not benefit from the education provided in the public schools at that time. Binet's work led to the development in 1905 of one of the oldest and most widely used assessment instruments, which led to the concept of mental age and later formed the basis for the Intelligence Quotient, or IQ. Instruments now are used extensively in relation to children's entry and placement in schools and institutions of higher learning; and the construction, standardization and validation of tests has become a science in itself.

**The term assess means to evaluate, to consider and conclude. An assessment is a way of assessing. The precise meaning attached to the term developmental assessment varies somewhat in different fields. In this section of this report, the use of the term developmental assessment in educational, medical and psychological contexts will be reviewed.

Formal psychological instruments are designed to be administered under precisely defined conditions. Their scoring is based on a comparison of the tested child's responses with those of a representative sample of other children of the same chronological age. The statistical model on which this type of test is based considers individuals to be on a continuum in relation to others, with respect to the domain being tested. Test results of more than two standard deviations above or below the mean are generally considered to be abnormal. However, it is those below the mean that are of concern.

In the past decade, the normative or statistical model for the construction of psychological tests has received reappraisal because of the social ramifications of the classifications derived from its use. In a paper prepared for the National Advisory Committee on the Classification of Exceptional Children,⁹ Jane Mercer criticized the use of the statistical model for the evaluation of behavior, as follows:

"The Traditional statistical model assumes that there is one normal curve and this distribution can be used to classify all children. This one "standard norm" is based on the behavior of persons in the Anglo-American mainstream, and consequently, produces relatively accurate predictions concerning those who will "succeed" in that mainstream. It institutionalizes the culture of the Anglo mainstream as the single, mono-cultural reference for normal."

Particular concern has been focused on tests, such as the Stanford-Binet Scale and the Wechsler Intelligence Scales, which are composed of variety of tasks designed to elicit information the test designers

consider indicative of intelligence, and which are used to define mental retardation psychometrically.

Also available for the assessment of development are a large number of tests, scales, profiles, and checklists which have been constructed by the selection of behavioral items which are placed at specific age levels on the test (See Appendix F for examples). These behaviors have been demonstrated to emerge typically, in the population studied, at the age level at which each item is placed on the instrument. Some of the items have been selected from the behavioral norms reported by Gesell and Amatruda in 1954,¹⁰ or from behaviors used in the construction of other instruments. In other instances, the developers of the instrument have derived norms for the behavioral items through observations of their own.

Some of the above tests require that information about the child be obtained through eliciting and/or observing the child's behavior. Others depend on information obtained from a parent about the child's current or remembered behavior in his or her natural environment. Some instruments address development as a whole, others address one or more specific behavioral domains; such as, language, motor development, etc. Some are reported numerically with a developmental quotient, others are reported as "normal", "questionable", or "abnormal". Tests which have been developed by health care professionals tend to be

somewhat less specific about the conditions under which the test is administered than is the case with formal psychological assessments such as the Binet and the Wechsler.

For behavioral norms used in the above assessments, there is little disagreement about motor items for the first two years of life.

However, after age two, as fine motor development items increasingly reflect perception and cognition as well as eye-hand coordination, concerns about culturally appropriate norms also apply to this approach to assessment. This is the case with language to an even stronger degree, for the child's use of a dialect rather than the standard English from which the test was constructed can be interpreted to indicate delay or abnormality in language development.

The AAPSC Instruments Committee expressed a number of concerns about existing developmental tests of the type discussed above, as follows:⁶

They are primarily tests of the child, administered to the child.

Certain of the defined areas of development combine and, therefore, obscure areas of development that need to be considered separately. For example, expressive language and comprehension should be clearly differentiated.

Classification may be based on the number of "delays" and the number of areas of the test in which delays occur. "This method, which summarizes across areas to make a judgement, obscures the need to make a judgement about the child's development in each area separately."

Tests described as developmental tests primarily have been validated against traditional intelligence tests which do not include gross motor, self-help and socio-emotional items.

Instruments lend themselves too readily to the traditional concept of screening for defects with quick and easy methods.

Instruments lend themselves to delegation to technicians.

The format of a screening test does not lend itself readily to teaching/learning more about the course of development for the clinician or the parent.

In an effort to provide a more effective approach to developmental assessment, participants at the 1977 AAPSC Conference on Developmental Review in the EPSDT Program recommended the use of stages. This was a screening mechanism which had been described by Meier,¹¹ involving the use of a developmental checklist in conjunction with the completion of a parent questionnaire at the time of a home visit. Questionable findings at this stage were considered an indication for more comprehensive evaluations at a second stage. This process was repeated through six stages. Participants at the 1977 AAPSC Conference recommended a shorter version of this approach, as follows:¹

Stage I consists of a review of biological dimensions within the framework of the physical examination of the child, (1) a structured parent report of the child's adjustment and emotional and behavioral status and (2) a structured parent report of the child's development (a developmental profile).

It was recommended in addition that there be

an opportunity for discussion of related aspects of the family situation.

Based on the information obtained in Stage I, it was recommended that a decision be made regarding the need for additional assessment; i.e., a Stage II evaluation:

Stage II consists of a direct structured observation of the child's functioning. However, it was "strongly recommended that no single instrument for developmental assessment be mandated nationally".

Based on the findings at the Stage II level, the need for a more comprehensive Stage III assessment would be determined.

Participants at the 1977 Conference also addressed a larger related question, that of the purpose of an assessment. Conference participants recommended that the focus be that of a developmental review which had the goal of supporting the development of the children served by the program:¹

"We do not see developmental screening only as a quick, simple procedure to identify those in need of further study but rather we see it as the first step in a way of engaging children and parents in an ongoing concern with their health and well being."

The answer to the above question relates directly to the approach to assessment which is chosen, for assessments of a different type from those already discussed also can be used in a health care setting, in a manner analagous to their use in the educational settings for which they were designed. Educators traditionally have used summative assessments to compare students' learning to that of other students for

the purpose of making a pass-fail or a percentile determination. In the past decade, a type of evaluation originally used in developing curricula has been used in intervention programs for young handicapped children. This "formative assessment"¹³ is used for the purpose of developing a profile of the child's current functioning in order to develop educational objectives. The focus is on the developmental sequences along which the child can be expected to progress, rather than on whether the rate of progress falls within the statistical or comparative norms. While distinctions are made between behaviors which are elicited only under special conditions and those which are elicited regularly in the child's natural environment, precision in carrying out the testing is considerably less than is the case in formal psychological testing. Formative assessments, coordinated with infant and preschool curricula, can be used in providing assistance to children with all degrees and types of handicapping conditions. They also can be used in providing anticipatory guidance for children whose development falls within the normal range.

Comparable in organization to the formative assessments in education are the developmental psychological assessments. Items in this type of evaluation are organized in sequences of increasing complexity, rather than being structured around the time of their occurrence. An example is the Uzgiris-Hunt Scales¹⁴ which permit inferences about the child's achievement of the levels of cognitive development which were described by Piaget.

With the exception of the developmental scales described above, the approaches to assessment which have been discussed focus on outcomes which are achieved behaviors. Another approach is that of studying the processes which appear to contribute to the achievement of developmental outcomes. These include among others, attention span, discrimination, vigilance, distractibility, activity levels,^{15, 16,17,18,19} and attachment, dependency-autonomy, and coping.^{20,21,22,23} There are a variety of other aspects of functioning for which assessment methods have been developed, for example, task mastery, locus of control, responsiveness to the social environment, etc.²⁴ However, it is not clear which are most relevant, and the sheer weight of numbers of possibilities makes their inclusion impractical in a routine health care evaluation. To evaluate processes such as those mentioned above, clinical judgement remains the approach of choice.

The approaches to assessment which have been considered thus far are derived from a conceptual model in which the child is viewed as the locus of normality or of a developmental problem. However, the overwhelming majority of recent publications on child development do not support considering the infant and preschool child's development without taking into account the social environment on which he or she must rely for nurture and guidance. Increasingly, an ecosystems paradigm appears most useful for understanding this age group. Thus the child's behavior can be conceptualized as an outcome of the dynamics of a family system, rather than the child's being perceived

as a machine that may be in need of repair.²⁵ Cause and effect are understood as reflecting mutual causality, each element of the system, child and parent, influencing the other (s) in their interactions. This concept is applicable to the development of the child who brings into the system a biological structure which deviates from the norm, as well as to that of the normal child.^{26,27,28}

The model used in understanding development has relevance in determining the focus of an assessment; i.e., is an assessment of the child in isolation appropriate, or should some aspect of the family system such as the parent's concerns about the child also be included? Neither the state of the art, nor the rights of the family with respect to the legitimate scope of inquiry into family life which are appropriate in a government financed program, can support a structured evaluation of family functioning as a part of a routine EPSDT assessment. However, there is strong support for widening the focus of assessment to include the parent, through attending to parent concerns and through efforts to engage parents in the process of determining actions which can be expected to enhance the development of their child.^{1,2,4,27}

The conceptual model used by the service provider also influences the decisions which are made in the instance of some question concerning the child's development. Traditional health care practice is based on

the sequence of evaluation and diagnosis, followed by treatment. It should be remembered that "disease is only a concept that has been abstracted for convenience" through the mechanism of prior agreement by professionals that a set of phenomena would be so characterized.²⁸ Diagnosis refers to the assignment of a set of findings to a disease category. This "pathological model" implies the presence of underlying biological structure for the disease. Definitions of handicapping conditions which include the criterion that the condition be "of an enduring nature" suggest that lifelong outcomes inevitably are associated with specific diagnoses. With this conceptual model, diagnosis can carry with it the implications of permanence.

The moderately or severely handicapped child can be identified in the majority of instances by parents, as well as by professionals. It is with the questionably delayed or at risk child that the greatest differences in opinions are voiced and differences in orientations of service providers are most apparent. For example, with orientation X, the identification of a developmental problem carries with it the implication that the child has a pathological problem of an enduring nature, while with orientation Y, the focus is on the existence of a problem which may respond to some type of intervention. Orientation X would operate to cause every possible step to be taken (for example, waiting to see if the delay is a transient one from which the child will emerge spontaneously) before making a diagnosis of the presence

of a developmental disability of some type. While orientation Y promotes beginning intervention on the most minimal findings or on what is considered to be the risk of a problem. The decision which is made regarding the appropriate action, in the instance of a question about a child's development, thus can be influenced by the explanatory model which the prior training of the provider has led him or her to use.

The orientation of the AAPSC Instruments Committee in its efforts to address the complexities of developmental assessment perhaps can best be summed up by the observations of the committee chairman, Harry Ireton: "The system we create will certainly be more important than any single element or instrument within it".³¹ The recommended assessment procedures were designed to supplement the information obtained in the physical examination of the child and to provide a structure for the organization of the clinical observations of the child. They also were designed to shift the focus of an assessment from that of the professional's testing and making a judgement about the child to that of engaging the parent in the information gathering and the decision making processes. The procedures include the systematic gathering of information about the child's temperament and parent concerns about the child's functioning. The forms also provide for recording the level of achieved behaviors in five domains. The age range in which behaviors are expected to occur is given to permit a comparison of the child's development with that of the normative rate

of achievement of behaviors in that domain. The behaviors are arranged in the expected sequence of their occurrence to facilitate their use as a formative assessment to assist in planning for the child. (See Appendix A for recording forms and Manual)

II

PROCEDURES FOR ASSESSMENT AND REVIEW OF DEVELOPMENT

(PARD)

PROCEDURES FOR THE ASSESSMENT AND REVIEW OF DEVELOPMENT (PARD)*

A prototypal developmental review, which is divided into the following steps, was developed for the Stage I/II Developmental Review in a primary health care setting for children under the age of 5 years (birth through 4):

1. Parent report of the child's temperament and of any concerns the parent may have about the child's functioning (Parent completes check list/questionnaire)
2. Parent report of the child's check current functioning; i.e., the developmental milestones which the child is currently demonstrating in his/her natural surroundings (Parent completes checklist of behaviors which are arranged in the expected order of acquisition in each of five areas; gross motor, fine motor (eye-hand coordination), language, socio-emotional, and self help)
3. Professional's examination of the child's physical status and functioning
4. Professional's use of such materials as are necessary to supplement the information obtained in #3, to elicit relevant specific behaviors on the checklist completed by the parent (Data is recorded regarding the developmental milestones which the child has achieved; i.e., those which identify his/her level of functioning at the time of the assessment.)

*See Appendix A for Manual and Recording Forms

5. Review by the professional of the data obtained in steps 1-4, determination of the degree of congruence between what the child is doing and those behaviors usually achieved by children of his/her culture and age. Assessment, on the basis of all data, whether, in the professional's judgement, there is an indication of a need to obtain a more detailed assessment (Stage III) or to repeat the Stage I/II assessment prior to the next regular scheduled assessment time.
6. Discussion by the parent and the professional of the child's functioning, the needs perceived by the parent and/or the professional, and any parent concerns.

Provision of anticipatory guidance.

If indicated, rescheduling for follow-up assessment (repeat of the Stage I/II assessment) prior the next regular scheduled appointment, or referral to another site for a more comprehensive assessment and/or intervention.

III

PURPOSE OF STUDY

CONSTRAINTS

DESIGN OF STUDY

PURPOSE OF THE FIELD STUDY

The field study was planned to address the following questions:

1. Clinical efficiency: What is the professional time required for the completion of the developmental assessment component of the EPSDT services? What is the value of the content items and arrangement of information in PARD in increasing the professional's knowledge, skills, and understanding relating to the provision of related services for the child?
2. Impact on parents: Does the mother find the process useful in contributing to her (or in the case of the father, his) understanding or her/his child's development and functioning? How satisfied or dissatisfied is she/he with the process?
3. Validity: What is the incidence of findings of questionable or definite delays in development, or developmental problems, and the congruence between the findings based on the use of PARD and those obtained in follow-up assessments?
4. As it was understood that the professionals in many EPSDT sites currently use the Denver Developmental Screening Test (DDST), a comparison of the recommended procedures with the use of the DDST, also was an expected outcome of the study.

CONSTRAINTS

1. Clinical Efficiency

It was expected that professionals would compare any approach to evaluating development with the approach to evaluation which they currently used, not only with respect to the contribution of the procedures to the task of assessment and the provision of guidance to the parent, but also to the time required. One intent of the procedures was to increase the efficiency as well as the effectiveness of the developmental review process. The use of a questionnaire in obtaining information from the parent, and the organization of information on the recording sheets to assist the professional in effectively using his/her time were priority goals. It was not possible, however, to make staff changes in the test sites to permit delegation of responsibility for completion of the questionnaire; so that, evaluations using PARD were carried out with the same staff responsibilities which were present prior to the field study.

2. Impact on Parents

Validity in the following section is defined as the degree of congruence between the results of the initial evaluation in the health care setting and the results of an in-depth assessment through formal psychological, neurodevelopmental, speech and language testing, and for older children, educational testing. To the child and his or her

family, validity would be defined as the degree of congruence between the child's needs for assistance, which is not available currently in his/her usual environment, and the professional's perception of this need, as a result of the use of the procedures being field studied. Information provided to the family in the context of the health care evaluation of development may meet a current need; for example, the provision of information to the parent about some aspect of the child's development, or information about the expectations which teachers may have for school related skills when the child enters the educational system, etc. One part of the field study therefore had the goal of determining parent response to the procedures.

It was planned that parent response to the procedures being field tested would be compared with parent response to the approaches to evaluating development in use prior to the field study. It was determined after the funding of the study, however, that the use of a questionnaire to obtain this information required prior clearance by the Office of Management and Budget, a process of several months' duration. Therefore, control data on parent response to the assessment procedures used prior to the field study could not be obtained within the time frame for which the study was funded.

3. Validity

An initial consideration was that of the method of determining the validity of the developmental evaluation procedures. It was clear that

practical considerations of time and cost would act as constraints in the design of the study with respect to validity. . The collection of data in a variety of settings imposed methodological problems which would not permit an ideal validation study in which all children would receive two assessments in order to determine congruence between Stage I/II and Stage III findings. It was decided to use the developmental-psychological assessments of the professionals to whom children with questionable findings were routinely referred as follow-up criterion measures. This procedure could permit the determination of "true and false positives" although it would not provide information about "false negatives". An additional constraint was that of the lack of control over the standardization of procedures in the administration of PARD itself by professionals at the Stage I/II initial site.

Although these constraints did not permit a stringent experimental design, it was expected that the value of the information which would be obtained from the variety of settings in which the study would be carried out would outweigh that of the alternative, an experimental study limited one group of children in one location.

DESIGN OF THE STUDY

A. Site Selection

It was decided that the diversity of populations served under the EPSDT Program required that the field study be carried out in a variety of settings. Accordingly, sites were chosen in both rural and urban areas from both the private and the public sectors. State EPSDT Directors, in states in which it could be expected that there would be a substantial representation of children from varied ethnic and cultural backgrounds in the EPSDT population, were requested to assist in the selection of study sites. The following criteria were used in the selection:

Characteristics of Provider Sites:

1. Urban

- a. Private
- b. Public

- (1) Practitioners currently are providing EPSDT developmental assessments.
- (2) The population served is heterogeneous with respect to the racial and ethnic distributions in the state.
- (3) There is a sufficient volume of assessments at the site to anticipate the completion of 100 assessments on children under the age of 5 years in a period of no more than two months.*

*For some rural private sites, it may be necessary to choose two sites, each of which would be expected to complete 50 assessments.

2. Rural

All of above, and

- (4) Site is sufficiently proximal (no more than 1 hour's driving time) to a metropolitan area, to anticipate beginning Stage III assessments within 60 days following Stage I/II assessments
- (5) Site is located in a community of less than 25,000 population
- (6) Site serves a population at least half of whom are from areas with a population of less than 2,500.

It was considered advantageous to modify the conditions specified in A(b) in three instances, as follows:

In a private provider site in Texas, the majority of children served were Hispanic and all of the professional staff also were bilingual and bicultural. In a private clinic in Ohio, the majority of children were Black and all of the professional staff also were Black. One public site in Ohio served a disproportionately high number of rural Appalachian families.

B. Subjects

Children below the chronological age of five years, who were brought to the provider site for EPSDT assessments, formed the basic study population. To complete the requisite number of assessments in the allotted time, in some sites, other low income children also were included (i.e., children from families whose income was slightly above the state EPSDT eligibility requirements).

C. Staff

Those professionals who customarily carried out EPSDT assessments in the primary health care sites were asked to participate in the study. In the instance of a referral of a child from the primary health care site to another site for additional study and/or intervention, input from the professionals at that site also was requested.

IV. METHOD

Phase I

A small number of professionals were requested to use the procedures to be studied and make recommendations regarding their applicability in a primary health care setting. Based on their largely informal recommendations, changes were made in the organization of the forms to be used, and some modification of content was carried out.

Phase II

Concurrent with the implementation of Phase I, the sites chosen for the second phase of the study were asked to obtain control data, as follows:

Each site was visited and the logistics of the implementation of study were planned. Staff was requested to complete an information sheet for tracking purposes on each child under the age of five years who received an EPSDT assessment during the control period of the study. Staff were asked to send a form, which was attached to the tracking form, to the site of a more comprehensive assessment and/or intervention, in the instance of a child's being referred for any suspected

developmental problems or development delay. (Copies of the written instruction and the tracking forms which were provided are included as Appendix B). Staff were requested to continue the control phase of the study until 100 control assessments had been completed in each category of provider site in each participating state. Follow-up sites were requested to complete the follow-up form and return it to the original provider site.

Following completion of the phase one study and the control section of the Phase II study, copies of the Instructional Manual and the recording form for PARD and a procedural chart (see Appendix A) were sent to each participating site. A second visit was made to each site in order to discuss the procedures and the instructional manual. Staff were requested to use the procedures being field tested in carrying out the developmental assessment component of 100 EPSDT assessments. The same tracking and follow-up forms were completed as in the first or control section of the study. Parents were asked to complete a questionnaire which requested their opinions about the procedures (Appendix C).

At the end of the data collection phase of the study, a third visit was made to each site for the purpose of interviewing participating staff regarding the use of the developmental assessment procedures. In addition to the discussion of the procedures, information from participating staff was obtained through use of a questionnaire (Appendix D).

One of the participating sites agreed to modification of the above procedures, to determine whether children, who might be identified as in need of assistance through more extensive assessment methods, were not being selected by the procedures which were being field studied (i.e., to identify "false and true negatives"). This site was located in an area in which staff identified a higher percentage of developmental problems during the control phase of the study than had other participating sites. In this site, all children who received development assessments were routinely evaluated by speech and language pathologists. Procedures for this extended study are included in Appendix E).

IV

DESCRIPTION OF SITES

Minnesota Rural Private

In the area in which this private site is located (northwestern part of the state), private health care providers had developed cooperative agreements with local school districts to carry out the developmental assessment component of the state required pre-school screenings. As this constituted a large percentage of assessments, the department of special education in the area's cooperative school program was asked to participate in the field study, also.

This site was a special education cooperative which served four counties. Staff included special educators, early childhood educators, speech therapists and occupational therapists. Initial assessments of children were done by special education teachers. In the even of a suspected problem, other specialists within the school program also evaluated the child and provided necessary school based services. Services focused on the child more than the family.

Other resources in the area included the Crippled Children's Program which in this area focused on children with physical handicaps but also accepted some children with presumed enviromental determinants of delay. Mental health services for children were limited.

IV. DESCRIPTION OF SITES

Minnesota Rural Private

Site 111A is located in the northwestern part of the state. This is a private practice medical center with a staff which includes pediatricians, family practitioners, pediatric nurse practitioners, and nurses. Services are provided for adults and children. The case load of EPSDT assessments is small.

Assessments of development are done by the nursing staff using the Denver Developmental Screening Test (DDST). The physical evaluation of the child and discussion of the findings is done by the physician. Parents complete a health history in advance of the examination of the child. Almost all are able to complete the forms without assistance.

Minnesota Rural Public (A)

Because of anticipated case loads at a level which would not permit the completion of the required number of children in the time frame of the study, two sites were chosen.

This site is a county nursing agency which serves three counties in the southern part of the state. The population served is predominately white but a few Indochinese families and Hispanic families live in the area. The majority live on farms or in communities with a population of less than 2,500. Most of the families could read and complete the forms which were used in the field study.

The agency routinely schedules home visits by the nursing staff prior to EPSDT clinic visits by parents and children. Information about the child's development is obtained and parent concerns are discussed. Assessments are performed by teams consisting of a nurse and a health aide, using the DDST. A team routinely sees the same children on subsequent EPSDT assessments. Suspected problems are referred to the public school assessment program or a social worker for additional assessments. Nurses may use the Portage Project³² activity cards in the provision of anticipatory guidance.

The Crippled Children's Program staffs rotating clinics in each region of the state. These clinics provide diagnostic and treatment services also. Services for handicapped children also are provided through a

Minnesota Rural Public (A) continued
network of Developmental Achievement Centers in each county. In this
area, the Developmental Achievement Center staff carry out extensive
personalized outreach activities. Staff include paraprofessionals and
teachers who use the Portage Project materials. Also there are mental
health workers, child and family social workers, and social workers for
handicapped/developmentally disabled persons in each center.

Minnesota Rural Public (B)

This is a county nursing agency which serves one county in the north central part of the state. The population served is predominantly white, but a few black families live in the area. The DDST is supplemented by the use of material prepared by a speech clinician to evaluate articulation. Almost all of the parents can complete forms similar to those used in the field study independently. An hour is scheduled for the full EPS screen, including the health assessment, vision, hearing and developmental assessment. Children with severe handicapping conditions usually are located at birth or on home visits. The EPSDT program is perceived by parents as providing regular "well-child" assessments. Children with possible developmental problems are referred to an assessment program provided by the public schools for additional evaluations.

Anticipatory guidance and health education have a high priority in the agency. A set of parent activity materials similar to those which are a part of the Portage materials are used routinely. Although a nurse does not regularly see the same family on repeated EPSDT evaluations, if a nurse is working with a family on some problem area, she can arrange to follow that same family on subsequent visits.

Resources in the area include the Crippled Children's Program and Day Activity Programs as described under site A. There is a home based program operated by the public schools for developmentally delayed

Minnesota Rural Public (B) continued

children and their families. Also, there is a pre-kindergarten program for parents and their children. There is difficulty in obtaining mental health services for young children and their families in this area.

Minnesota Urban Public

This site is a county nurse agency located in a metropolitan area. Approximately an hour is scheduled for each EPSDT assessment, which includes anticipatory guidance in addition to the Denver Developmental Screening Test, a physical examination and vision and hearing screen. Information sheets covering many items which are included in the procedures being studied are routinely mailed to parents in advance of the EPSDT evaluation. Almost all of the parents are able to complete the forms without assistance. Clerical support staff are available to answer any questions the mother has about specific items. The nurses report that there is considerable parent interest in the developmental assessment component of their evaluations. A number of families who receive continuing care from a private physician apparently receive health care but are not receiving developmental information about their children. These families receive developmental assessments through the county nurse agency.

Child find services for handicapped children in this area start at birth with an outreach program which begins in the newborn nurseries of the local hospitals. Children who are found, in the EPSDT evaluation, to show questionable development generally are referred to the public school program for further assessment and/or intervention services. There also is a Crippled Children's program to which children can be referred.

Minnesota Urban Private

This is a large private practice medical center with a staff of pediatricians, family practitioners, and nurses. It is located in a metropolitan area and serves a largely middle class population, almost all of whom are white. Services are provided for adults and children.

Because of internal logistical problems, it was not possible for this site to provide information, regarding the use of the procedures which are being field tested, in the time available for the study. However, control data from this center was obtained and is included in the data analysis..

Ohio Rural Private

This is a private practice group of four pediatricians which is located in the southeastern part of the state. Staff includes a pediatric nurse practitioner and three nurses in addition to clerical support staff. The waiting room has a number of children's toys and a number of pamphlets for parents (to take home), which relate to the development of young children. The population which is served is predominantly white (less than 10% Black). About half of the families are from the town of about 25,000 population in which the practice is located, the others are from the farming and coal mining area which surrounds it.

Families periodically complete a health questionnaire which includes some questions about problem behaviors. The greatest majority can complete forms similar to those being field tested without assistance. Children are scheduled at regular intervals for routine "well child" assessments. The Denver Pre-Developmental Questionnaire (PDQ) is routinely completed by one of the nurses. If there is a suggestion of a problem, a DDST is completed by the same nurse. This information is available for the physician when he examines the child, talks with the parent, and provides anticipatory guidance.

Resources in the area have diminished with the loss of family physicians and the shrinking of Appalachian funds, so that large numbers of families in the rural areas have access only to emergency care. Funds for county nurse services are limited and the County Health Department

partially funds only an immunization program. In the community in which this group is located, there is a medical center staffed by an occupational therapist, a speech therapist, a nurse and a social worker, which provides developmental assessment services. Neurological evaluations are referred to a city approximately one hour's driving distance from the site. Intervention services are provided for children with cerebral palsy, and/or speech and hearing problems by an Easter Seal program. There also is a Head Start Program.

This site is located in the southeastern part of the state and serves a population of Appalachian farming and coal mining families. In some of the rural areas surrounding the site, families continue to use wells and outdoor toilet facilities. Approximately half of the families were able to complete the PARD forms unassisted.

This site is the child development unit of a community hospital with 80 beds. Through the actions of concerned citizens, one of whom continues to serve as director of this site, a group was organized in the early 1970's to obtain funding for comprehensive services for children. Because of the large number of speech and hearing problems which have been found in the children for whom assessments now are provided, routine assessments of development are carried out in the speech and hearing clinic by the speech pathologists. Children routinely are tested using the following: For younger children, the Receptive--Expressive Emergent Language Scale (REEL) is used. Older children are tested with the Peabody Picture Vocabulary Test (PPVT), and for grammatic closure, a portion of the Illinois Test of Psycholinguistic Abilities (ITPA) is used. All children receive an audiological examination and are assessed for voice quality, phonology, rhythm, and nasal resonance, as well as for gross and fine motor development. The physical examination of the child is carried out by a pediatrician.

Ohio Rural Public continued

Resources includes speech therapy in the speech and hearing clinic, where therapists work with the family and the child, and access to both occupational and physical therapists in another section of the hospital. Day care services include an individual program plan for each participating child. There are Head Start centers, also. Apparently largely through the insistence of staff from other agencies, the local mental health and counseling center recently added a child mental health professional to its staff.

Ohio Urban Private

This site is a private practice medical center which is composed of three pediatricians and nurse staff. All of the professional staff are Black and the majority of the patients served also are Black.

The Physician who agreed to participate in this study believes that children's development should be followed closely in regular well child assessments. He prefers a general clinical assessment unless some problem is suspected, in which case, the DDST is done by a nurse. While many parents could complete the PARD forms, for some the presence of other children who had accompanied them to the office made this difficult.

Milder cases of developmental problems are followed on-site. More severe problems are referred to Crippled Children's program or to infant stimulation programs in the area.

This site is the department of pediatrics of a very large metropolitan hospital, which is located in an area of urban blight. The EPSDT population served is approximately 60% white and 40% Black, although there are a few Hispanic families served at the clinic. Staff estimated that at least half of the families served would not be able to read and complete the PARD forms unassisted.

With the exception of the senior staff, the professional staff appear to place a much higher priority on emergency and episodic care than on developmental assessment and anticipatory guidance. The information received indicates that staff feel that the DDST takes about twice as much time as an acceptable developmental screening test should take. They prefer a general clinical evaluation as the method of assessment. Some staff spend less than 5 minutes, others up to 15 minutes, on the developmental assessment component of an evaluation.

Resources in the area include psychologists, occupational and physical therapists, and speech pathologists in other departments of the hospital. There also is an infant stimulation program in the city to which children and families can be referred.

Texas Rural Public

This site is a Mobile Team staffed by two nurses (English speaking) and a laboratory technician (bi-lingual). It provides services to 19 counties in a sparsely populated area in the southwestern part of the state. Clinics often are held in the educational buildings of churches. The families served are low income families (welfare recipients) principally, approximately 85% of whom are Hispanic in some counties. In other counties, there are a number of Black families, in addition to Hispanic and white families.

The routine EPSDT evaluation includes a physical examination and vision and hearing screen and the use of the PDQ. In the event of questionable findings, the DDST also is used. Only a small percentage of the parents who accompanied the children to the test site could complete either the English or the Spanish version of the PARD FORMS. Not infrequently, efforts to obtain information from the parent were hampered further by the number of young children accompanying the parent to the test site. The nurses provide some anticipatory guidance in the context of the examination of the child.

Resources are very limited. Head Start accepts children at age 4, but there are many children who could benefit from services who are unable to be admitted to the small number of available places in the Head Start programs. Some children are eligible for and receive services in migrant programs at age 4. No geographically accessible intervention resources of any type appear to be available for children under the age of 4 years.

Texas Urban Private

This site is in a private, non-profit comprehensive health care center in a metropolitan area. All professionals are bi-lingual and bi-cultural (Hispanic) and the population served is predominately Hispanic. A committed and creative director has secured funding for a wide variety of services within this center. Staffing of the health care components include a pediatrician, a pediatric nurse practitioner, nurses, and a child psychologist.

The standard EPSDT assessment of development includes the DDST and the physical examination of the child. Anticipatory guidance is given a high priority in this center. When there is an indication of questionable development, or stress in the home is perceived as contributing to a risk of developmental problems, assistance is provided.

A number of resources are available within the center itself. Volunteers from a Senior Citizens program are trained, supervised and transported to the homes of families to provide assistance to parents. This program provides services for infants at risk as well as for instances of developmental delay which appear to be related to environmental determinants. There is a center based pre-school program for three year olds, and a Head Start program for four year olds. There also is a center based program for mothers and children, in which children with language delay can receive assistance. Children with physical handicapping conditions are referred to the area Crippled Children's program.

Texas Urban Public

This site is a metropolitan health department which operates clinics staffed by a team of nurses (English speaking, predominantly). The population served is approximately 60% Hispanic, 20% Black and 20% White (Anglo). All PARD forms in this group were completed by the nurses because even in the instance of parent ability to complete the forms, the time required for this step was too great.

The routine ESPDT assessment included a Texas State Child Development Assessment in addition to a health history, physical examination, height and weight, vision and hearing screening. One nurse is scheduled to complete the assessment of 10 to 15 children in a four hour period. Nurses would like to provide more anticipatory guidance, but the time available per child does not permit this. The problem is complicated further by the lack of transportation resources other than those provided within a rather inflexible time schedule to bring families to and from EPSDT clinics. Although there is some stability in the population served, nurses rarely are scheduled to see the same child in successive evaluations.

Resources in the area include Head Start programs, daycare centers, the W.I.C. program and agencies participating in United Way; i.e., MHMR, Birth Defects, Commission for the Blind, and the Anemia Association. In some instances the family prefer that a referral be made to a family doctor or specialist.

V

RESULTS

RESULTS

1. Professional Questionnaire

The professional questionnaire was completed by a total of 28 professionals from the following disciplines:

Nursing	74.0%
Medicine	17.5%
Education	4.2%
Undefined	4.3%

Each professional reviewed an average of 34 children using the procedures which were being field studied.

The average time required for completion of the developmental assessment, using the procedures which were being field studied was reported as follows:

Information gathering	17 minutes
Interpretation of data	9 minutes
Feedback to parents	<u>12 minutes</u>
Total time	38 minutes

A comparison of the questionnaires received from professionals in the public and private sectors reveals the following significant differences:

	<u>Public</u>	<u>Private</u>	
Information gathering (minutes)	21.0	11.4	(F=4.93, p= <.04)
Interpretation (minutes)	<u>12.3</u>	<u>4.3</u>	(F=6.74, p= <.017)
Total Time	46.5	27.0	

There were no significant differences in the time reported for providing feedback to the parent.

A number of factors may have contributed to the differences between the public and private sectors. On-site interviews with participating staff revealed large differences in the time routinely allocated to carrying out a developmental assessment in different sites. This time varied from less than ten minutes to forty-five minutes or more. As this correlated with the number of children for whom the staff member was scheduled to provide services during the working day, staff perception of the time available may have had an effect on the time which was required for completion of the developmental assessment. Familiarity with patients in those sites in which the same patient had been followed over a number of months or years also could be expected to have decreased the time required for the completion of an assessment.

The respondents to the questionnaire were asked to indicate how much they felt that the combination of approaches to assessment which PARD represents contributed to their knowledge about child development and their skills in assessing a child's development. Ratings of NOT AT ALL, A LITTLE, SOMEWHAT, A GOOD DEAL, and VERY MUCH were assigned numbers, ranging from 1 (NOT AT ALL) to 5 (VERY MUCH). Each of the developmental domains which were included in the developmental map was reported separately (i.e., Gross Motor, Fine Motor, Language, Self-Help, and Social/Emotional). The average ratings on all items clustered around 3, with a range from 2.7 to 3.4.

Significant differences between rural and urban respondents were found on a number of items. In comparison with urban respondents, the respondents from rural areas reported that the use of the

developmental review procedures which were being field tested (PARD) contributed to a greater increase in knowledge/skill in the following areas:

Gross Motor	Skills	(F=11.40, p= <.004)
Fine Motor	Knowledge	(F=34.90, p= <.001)
	Skills	(F=21.17, p= <.001)
Self Help	Knowledge	(F=12.10, p= <.003)
	Skills	(F=10.64, p= <.005)
Social-Emotional	Skills	(F= 5.28, p= <.036)

The above differences held regardless of the type of practice. No significant differences were found between urban and rural respondents in the remaining areas.

Respondents were asked to compare the developmental review procedures to the methods they previously had used to assess development in children. 85% of the comparisons were made on the basis of previous use of the Denver Developmental Screening Test (DDST). The average ratings across all sites (on a scale of 1-5, where 1 was considerably less, 2 was less, 3 the same, 4 more and 5 considerably more) were as follows:

Time	4.1
Practical Utility	3.0
Comprehensiveness	3.9*
Parent Acceptance	3.5
Yield of data for referral	3.2

*70% of respondents rated the procedures as more or considerably more comprehensive.

Although manuals relating to the use of the procedures and an opportunity for discussing them was provided, it was learned in later site visits that not all of the participants had read the manual. Some apparently decided on the procedures required to carry out an assessment by reading the recording forms only, or by talking with another staff member who had attended the orientation meeting held prior to the beginning of the use of PARD. This may partially explain the correlation between the time reported spent in interpreting information and the rating regarding comprehensiveness. The more time a respondent reported spending interpreting information, the less comprehensive was the rating she or he gave in comparison with other approaches to assessment ($p \leq .009$).

Significant differences in perceptions of PARD were reported by respondents in the public as compared with the private sector, as follows: Respondents in the private sector saw the procedures as more comprehensive when compared to existing methods ($F=6.81$, $p = <.016$) than did respondents in the public sector. Also, respondents from the private sector reported that PARD yielded more data than had their previous methods, as compared to respondents from the public sector ($F=12.47$, $p = <.002$).

In a comparison of the responses received from each of the three participating states, additional significant differences in ratings are found, as follows:

Texas and Ohio respondents rated the procedures as more comprehensive

than did respondents from Minnesota ($F=4.65$, $p= <.02$). Also, Texas and Ohio respondents rated PARD as yielding more data for referral than did respondents from Minnesota ($F=7.70$, $p= <.003$). The differences in existing procedures prior to the study in different areas which are described in the descriptions of sites may have contributed to these differences in perceptions of PARD.

No significant between-states differences were found in ratings of time required for completion, practical utility, or parental acceptance

It is not clear why the ratings of parent acceptance are at a level which is approximately the same as that of previous methods, because this report differs appreciably from the information obtained from participating staff in on-site interviews. In only four of the twelve sites which took part in the use of PARD, were less than very positive comments received regarding parent acceptance. In one of these, the staff felt that the number of questions was too great for their non-literate service recipients. In two others a number of the questions were included in the information already being gathered at that site, and thus some of the questions were seen as repetitive. In both the private and public sector in eight sites, interviews with participating staff indicated a strongly positive response of parents to the degree to which they were included in these developmental review procedures. These comments were voiced by staff spontaneously in the majority of instances at the time of the third site visit.

Comments made by professionals included the following:

"The parents really like it!"

"It engages the parents and they ask considerably more questions."

"Parents often asked if their relatives or friends could bring their children in for this test"

At one site, a pediatrician said that:

"The parents enjoy having their opinions asked."

"A lot of parents say they don't think they understand enough about child development."

At another site, staff reported:

"This encouraged parents to talk. Some parents seem so eager to talk to a professional about their children".

At other sites, the parents were described as appreciating receiving the copy of the developmental map which was given to them at the completion of the assessment visit.

Participating professionals were asked to rate the different sections, of which the review is comprised, and the accompanying manual, on a 5 point scale: very useful (1), useful (2), questionable (3), not very useful (4), useless (5). Responses clustered between questionable and useful, with the greatest number of positive responses relating to the parent report and parent interview sections. The parent report section was reported to be useful or very useful by 77% of the respondents. In contrast, 54% found the decision making guidelines for the developmental map questionable or not very useful. This is congruent with findings relating to this section of the protocol which will be covered later in this report.

The procedures were rated as useful to very useful in overall effectiveness by 73% of the respondents. This rating correlated significantly ($p = <.02$) with the number of children reviewed by the procedures; i.e., the greater the number of children reviewed, the more likely the respondent was to perceive the procedures as effective overall. There is probably a circular effect with respect to this finding. The more useful the respondent found the procedures initially, the more likely he or she was to use them on a greater number of children, and the greater the number of times the procedures were used, the more efficient would be the user. Thus a practice effect may be present, even though the number of children reviewed did not correlate significantly with the amount of time reported as necessary for the completion of the review procedures.

There was a significant difference between states in some instances in rating portions of PARD, as follows:

Minnesota found the parent report most useful ($F=3.60$, $p = <.046$), Texas found it least useful.

Texas found the interpretive guidelines most useful ($F=9.01$, $p = <.002$), Minnesota and Ohio found them least useful.

There were no differences found between rural/urban and public/private sites in the ratings of the subsections of the PARD.

2. Parent Evaluation of the Child Development Review

A second component of the study was the use of a questionnaire (see Appendix C) to determine parents' opinions regarding the procedures which were used in the study. As stated in the description of the study, it was learned after the plan for the study had been completed that this information could not be obtained from parents without receiving prior clearance from the Office of Management and Budget. Although efforts to obtain this clearance were begun within the first two weeks of the funding of the study, this clearance could not be completed prior to the end of the gathering of comparative data. For this reason, parent satisfaction or dissatisfaction with PARD could not be compared with the assessment procedures routinely used at the site.

The parent respondent group for the portion of the study in which PARD was used was 77.6% of the total number of participating parents or parent surrogates. The composition of this group was as follows:

Mothers	95.7%
Fathers	0.9%
Grandmothers	1.9%
Aunts	0.2%
Others	1.3%

The parent questionnaire consists of a series of questions to which each parent was asked to respond by circling one of the following: NOT AT ALL, A LITTLE, SOMEWHAT, A GOOD DEAL, or VERY MUCH. Parents

also were asked to make any comments they wished to make. Some of the comments were personal, such as "I don't feel comfortable talking to strangers". Others were suggestions such as "Dr. should take more time looking at the child". Some parents circled the rating but did not add any comments.

To question A., "How comfortable did you feel about asking questions and talking about anything that concerns you about your child's development?", 60% of the respondents answered VERY MUCH, and 94.4% responded a GOOD DEAL or VERY MUCH.

To question B., "How well were your questions and concerns about your child's development listened to and discussed?", 58.6% responded VERY MUCH, while 93.9% responded a GOOD DEAL or VERY MUCH.

To question C., "How much did answering the written questions and talking about your child's development help you to better understand your child?", 38.1% circled VERY MUCH and 76.2% circled a GOOD DEAL or VERY MUCH.

To question D., "How satisfied were you with the discussion of your child's development?", 55.2% responded VERY SATISFIED, while 96.9% responded SATISFIED or VERY SATISFIED.

In answer to the question, "Would you recommend this child development review to other mothers that you know?", 96.8% answered YES, while only 4.2% answered NO.

The fact that there were a number of different responses to different questions on individual questionnaires argues against explaining the above answers as a response set on the part of the parents. The above very positive responses are in agreement with the large number of comments made spontaneously by professionals in the private and in the public sector about the first part of the assessment procedures, which provided for a systematic review of parent concerns and the description by the parent of the child's temperament. As discussed above, comparative data on parent perceptions is still needed to provide definitive answers to the question of how parents react to developmental procedures of any type. On-site interviews, which were carried out to supplement the data which could be obtained by questionnaires, indicated that the parents were highly satisfied. Whether their satisfaction related to the parent engagement which the procedures (PARD) were designed to achieve, or whether parents would express equal satisfaction with other procedures is a question that is deserving of further study.

3. Validity Study

The expected sample for Group I (the comparison group) i.e., the children whose assessment was carried out using the procedures in use prior to the field study, was 1100 children. For this group, an 84.4% response was received (N=928).

The expected sample for Group II (the study group); i.e., the children with whom the developmental review procedures (PARD) was used, was 1000 children. For Group II, a 60% response was obtained (N=599) One case was discarded from the sample because of missing identifying data, leaving a final N of 599 children.

For the combined sample, (Group I and II), the language spoken in the home was as follows:

English	71.2%
Spanish	7.8%
Bilingual (Spanish-English)	20.8%
Other	0.2%

Race and Ethnicity distributions were as follows:

Hispanic	32.0%*
Non-Hispanic:	
White	59.2%
Black	7.6%**
Native American	0.5%
Asian	0.6%
Unidentified	0.1%

*Hispanics are over-represented in comparison to national census data, an outcome of the use of Texas as one of the three study states.

**Less than 30% returns were received from the two sites which had a large Black population; therefore, the total percentage of Blacks is below the anticipated level.

In the combined sample (comparison group and study group), 50.4% were boys and 49.6% were girls.

The mean age of the comparison group (Group I) was 27.33 months.

The mean age of the study group (Group II) was 29.07 months.

Group II was older than Group I by a mean difference in age of 1.7 months, which is significantly different ($t=3.60$, $p= .01$)

The age distribution was as follows:

00 - 12 months	22%
13 - 24 months	24.7%
25 - 36 months	15.5%
37 - 48 months	20.7%
49 - 60 months	16%
61+ months	1%

In Group I, 6.2% of the children were reported to have a suspected or definite developmental delay/problem. In Group II, 6.2% of the children were suspected of having a developmental delay/problem.

The percentage of children per site who were suspected of having a developmental delay/problem (Group I and Group II combined) ranged from 0% to 22%.

The mean age of the children reported as not delayed was 28.75 months.

The mean age of the children reported as having a possible delay/problem was 37.5 months. The children who were considered to have a possible delay/problem were significantly older than the non-delayed children. ($x=28.75$) ($t=3.22$, $p= <.003$).

In Group II, the study group, there were a total of 28 children who were identified as having a questionable or definite delay/problem. Of these, 21 were boys and 7 were girls. The male to female ratio of children with a delay/problem was significant ($\chi^2=5.57$, $p < .018$). Males and females were equally represented among the non-delayed children.

Interviews with staff indicated that the referrals in the majority of instances were to resources for possible intervention/treatment, either on-site or at another geographically proximal location. These included intervention programs operated by the public schools, speech and hearing centers, Crippled Children's programs, Easter Seal programs, and Head Start programs. No child in either group was referred to a multidisciplinary diagnostic center or to a mental health center.

There appeared to be some variation between sites in the resources to which a parent and child could be referred and in the indications for referral. These ranged from referral in the instance of a perceived risk of a problem (minor findings in the child or concern that the mother was in need of assistance herself) to referral only in the instance of apparent neurological problems. In some rural sites, staff used developmental curriculum materials in the provision of anticipatory guidance. Some staffing patterns permitted home visits. Others permitted only brief assessment interviews and no continuing care by the same staff member for a child and parent. In some areas, there was an abundance of resources to which children and parents could be referred, in others, very few. It would be expected that

these factors would be reflected in the range of rates of referrals which occurred across sites.

For those children in Group I who were identified as having a developmental delay/problem, the report of a second evaluation was received in 34 instances. For this group, the report of the second professional was congruent with the findings in the the initial assessment 69.6% of the time ("true positives"). It was not congruent 21.7% of the time ("false positives"). Through some unexplained process, 8.7% of the children who had been reported as within the normal range received a confirming second negative assessment (8.7% "true negatives"). The design of the study did not permit the identification of "false negatives" in this group.

In Group II, the arrival of summer appears to have led to a delay in families' seeking a second opinion regarding their children's development in many instances. Efforts to obtain second opinions from the sites to which children had been referred were unsuccessful because the children had not been scheduled for an assessment. The most complete set of second opinions were received from one site. For the total group on whom a second opinion was received (N=13), the report of the second assessment was congruent with the findings at the initial site 69.23% of the time ("true positives"). It was not congruent 30.7% of the time ("false positives").

The site from which a complete set of reviews by a second professional

was received is a site with a strong focus on speech and hearing. At this site, EPST assessments are carried out routinely by the professional staff from the speech and hearing center. Staff use the Gesell and Amatruda norms for motor development in conjunction with the Peabody Picture Vocabulary Test, the Receptive-Expressive Emergent Language test, and the Grammatic Closure section of the Illinois Test of Psycholinguistic Abilities (as appropriate for the age of the child). In addition, phonology, rhythm and nasality of speech are evaluated routinely. Forty nine (49) children received the above battery of evaluations and separately were assessed in the health care setting. The levels of behavioral milestones recorded by the parent on the PARD Form B and those recorded by the professional on the DDST were used as a supplement to the information obtained in the physical examination of the child.

Of the children who received assessments in both the health care and in the speech and hearing settings (N=49), 1 child was considered in the questionable range on the PARD developmental map. Concerns about activity levels recorded on Form A appeared to contribute to the decision to refer in 2 other children. The contribution of other concerns recorded on Form A to the decision to refer the child for additional services cannot be determined from the available data. Eleven children were referred from the health care site. Of these 11, 9 were recommended for additional services by the speech and hearing staff (18.8% "true positives"), and 2 were found to not be in need of additional services. (4.1% "false positives"). However, an additional

6 children who were not referred from the health care evaluation were found by the speech and hearing center assessment to be in need of additional services. (12.4% "false negatives"; 64.7% "true negatives"). It is of interest that on the basis of the scores of the Denver Developmental Screening Test alone, 1 child would have been referred as "questionable" and one as "abnormal" (4.1% "true positives", no "false positives", 26.5 % "false negatives"). The small total number of children who were identified as having a delay/problem does not permit any conclusions to be drawn from these data.

In the combined sample (N=1527), only one child was reported to have cerebral palsy, and no child was reported to have Down's syndrome or any other moderately or severely handicapping condition. Thus, the children who were identified to have a delay/problem were principally those children about whom differences in opinion concerning the significance of findings is most likely to occur. This is especially the case in the area of language development. Whether an Appalachian English dialect, for example, contributed to the large percentage of referrals in the above site is not known. If this was the case, a consensus would not be expected as to whether the child is best served by providing assistance of some type or by accepting the dialect as a variant of Standard English. Some of the variations in referral rates and in the congruence between first and second opinions may be accounted for by differences in perceptions of this type.

The Contributions of Each Procedure to the Developmental Review

Step one in the developmental review procedures consisted of systematically obtaining information from the parent concerning (a) parent concerns about a number of aspects of development (ability of the child to talk, to listen and understand, amount of crying, etc.). (See Form A of PARD in Appendix A for the complete list.) Form A also included a list of characteristics, on which the parent was asked to check those which best described the child. This list included characteristics which could be expected to have positive consequences for the child; such as, loving, easy to care for, affectionate, good natured, happy. It also included characteristics which could be expected to have negative consequences for the child (too active, hard to handle) and/or were suggestive of distress in the child (fearful, sad, unhappy, likes to hit head against wall or bed).

Sixty-two and one tenth percent (62.1%) of the parents of the children who were considered to have a developmental delay/problem reported one or more of the concerns which were listed. The parents of the children in the delayed/problem group reported a significantly greater number of concerns than did the parents of the non-delayed/problem group ($t=3.21$, $p= <.001$). In some instances, characteristics such as "too active" were checked on the second list and a comment about concern over this was added in writing; so that the second list identified additional concerns on some forms.

In an effort to tabulate the characteristics on the second list, characteristics were assigned to negative, positive and equivocal categories. In the equivocal list were placed characteristics such as "likes to fight" which, from the comments written on some forms, appeared to have negative connotations to some parents and positive ones to others. No significant differences between the developmental delay/problem and the no delay/problem groups could be determined.

A review of the records suggests, however, that a refinement of the parent concern list would increase the value of this element of the procedures in identifying children with a need for additional assistance. It is of interest that 35.8% of the parents of children who were not considered to be in need of assistance for any developmental delay/problem checked that they had one or more of the concerns that were listed.

A review of individual records suggests that the information obtained on Form A may have been used less than had been expected. Children described as too active by the parent, children described as rocking and "liking to hit head against wall or bed", and children described as sad and unhappy were not necessarily referred, either for a follow-up regarding the effect of services provided at the time of the assessment visit, or referred elsewhere for a second opinion regarding the need for assistance for the parent or the child. As the information gathered on this form is not gathered on the Denver (DDST), this prior routine may have contributed to the degree to which the information was used by the practitioner.

Step two in the developmental procedures consists of obtaining from the parent information about the behavioral milestones which the parent has observed the child to demonstrate in the child's natural environment. This is not a history of the time of achievement of behaviors, it is a description of current levels of functioning, based on the parent's observations. It is recorded in five domains: gross motor, fine motor, language, self help and socio-emotional development. (See Appendix A. This information is to be recorded in the R columns on Form B.) In some sites, only the parent's report was recorded on the forms. On those forms on which both the parent's report and the professional's observations were recorded, parent-professional recorded disagreement ranged from 3% to 4%. This supports the use by the professional of this information which can be obtained by the parent's completion of this part of the recording forms. This use can decrease the time required by the professional to elicit behaviors for the purpose of determining the level of achieved behavioral milestones.

Step three is the examination of the physical status and general functioning of the child. The other steps are designed as adjuncts to the observations of the child which are a part of this step.

Step four is the professional's use of such materials as are necessary to elicit relevant specific behaviors to determine whether his/her observations are that the child is functioning within the expected range. The PARD is designed for the observations of the professional to be recorded in the O columns on Form B. This step may be carried out through the use of a developmental instrument of some type.

Step five is a review of the information obtained from all sources in order to determine (a) the congruence between the child's functioning and that usually achieved by children of his/her age and culture, and (b) the indications that the child is or is not in need of assistance not now available in his environment. A review of the findings from the use of Form B, the record of behavioral milestones, demonstrates that the criteria for determining whether the child's behavior fell within the expected range erred on the side of leniency. For example, the percentage of children reported in the advanced range was 25 - 41.5% across the five scales. Revision of these criteria is indicated prior to further use of this instructional manual.

In addition, it appeared that distinctions in the language domain which were possible with the use of PARD were not explained with sufficient clarity in the manual. In no instance did the professional record receptive language, expressive language and articulation as separate aspects of the language domain, as had been recommended in the manual. This suggests the need for training to ensure that assessment materials are used in the most effective manner possible.

Comparisons of the reports from PARD with those from a second site are possible on only two children, in addition to those at the one site described above in the review of summary statistics. Neither PARD nor the Denver (DDST) correlated significantly with the results reported from the second evaluation on the children on whom two assessments were obtained at this site, nor was there significant correlation obtained on the two other reports.

DISCUSSION

Any discussion of the results of the field study must be placed in the context of the use to which any assessment procedures will be put. Is the intent of the assessment (a) to detect the largest possible percentage of delayed/problem children, (b) in the manner most conserving of the professional's time? (c) Is the intended outcome that of the professional's informing the parent that the child is or is not within normal limits? Is the intent to engage the parent in the process, (a) as a provider of information, (b) as a contributor to the decision making process, and (c) as a provider of services for the child, whether the child is or is not developing within expected ranges? The answers cannot be provided through a field study. But meaningful policy decisions must be based on an answer to these questions.

The procedures which have been field studied may be used only to evaluate and determine whether or not the child appears to be within normal limits, and they can be used to engage the parent in the developmental review process. The materials which were used in the field study could be used (as described in the results section, with a revision of the criteria upon which determinations on the developmental map are based), or existing assessment instruments could be substituted in one or more of the steps which have been outlined. Indeed, both of the approaches appear to have been represented in the field study.

To provide examples of the elements which may be included in the assessment process, it is convenient to consider levels of service delivery which may be found. The information obtained in visits to the study sites suggests that the characteristics of the population served (children seen regularly in continuing care or not seen regularly by the same practitioner), and the staffing patterns which funding permits, are partial determinants of the level which is found at any site.

At one level, services include the following steps (The numbers on the left refer to the procedural steps in the PARD):

1. Information is obtained from a parent systematically by questionnaire, concerning some aspects of the child's functioning in his/her natural environment and parent concerns about the child's functioning
(Through the use of Form A on the PARD, or another questionnaire which addresses parent concerns)
3. Physical examination/clinical evaluation of the child's developmental status is carried out.
- 2/4. Information is recorded as to the current level of achieved behavioral milestones in separate developmental domains (motor, language, etc) Information may be obtained from the parent and/or by observation and eliciting specific behaviors. (Through the use of PARD: Form B, or the use of an assessment instrument)
5. Information is provided to the parent concerning the child's

developmental status.

Anticipatory guidance related to specific observations of the child is provided. This may be combined with the use of printed materials relating to child development.

A less comprehensive level of services would include the following steps:

1. Information is obtained from a parent informally in the context of the examination of the child
3. Physical examination/clinical evaluation of the child is carried out.
- 2/4. Information is recorded about the child's general status only; i.e., no record is made of individual behaviors.
5. Information is provided to the parent about the child's general status

Anticipatory guidance is not provided regularly

On-site interviews indicated that the routine developmental assessment services provided in each of the individual field study sites was at some point on a continuum between the two levels of delivery described in the preceding material. Differences did not relate to the quality of the service provided. Rather, there were differences in the definitions of the number and the characteristics of the individual steps which should be included in a developmental assessment.

A number of factors which have been noted in the body of this report appeared to contribute to differences in definitions regarding the composition of a developmental assessment. One of these is that of the efficiency of different approaches. The PARD was designed to facilitate the engagement of the parent. As a part of the process, attention was directed to the most effective use of information obtained from the parent. The recommendations made at the AAPSC EPSDT Conference in 1977 were for the use of information obtained from the parent as a supplement to the professional's observations of the child during the context of the health care evaluation. This appears to have been the practice in a number of the sites which participated in this field study. Step 4, the eliciting of specific behaviors by the professional appeared to be limited only to a small number of behaviors in some instances, and in other sites only the parent report of behaviors was recorded.

The more extensive eliciting of behaviors by the professional, and the determination of the congruence of the individual behaviors with a set of standardized norms which the professional has found to be appropriate for the population served (Step 4 in PARD, or the use of an assessment instrument), then becomes what the 1977 Conference participants called a second stage in the assessment process. Whether this is used routinely or only in the instance of a suspected problem may depend in part on the familiarity of the professional with the child and the expectancy of regular opportunities for review in the future. The data obtained in this study would support the

recommendations of the 1977 Conference for the use of stages as screening mechanism, with information obtained systematically from the parent concerning the child's functioning in his/her natural environment as a first stage. This should decrease professional time spent in what was reported as the most time consuming step in PARD. As administrative decisions regarding staffing patterns and reimbursements for services will influence the services which it is feasible to deliver, it appears relevant to repeat one statistic from the result section. It should be noted that 35.8% of the parents of children, whom the professionals found to have no indication of developmental delay/problem, reported having concerns about some aspect of the functioning of their child. This would appear to provide strong support for not limiting the assessment process to a test of the child. Rather, it would support providing an opportunity for all parents who chose to do so to discuss their child's development with a member of the staff of the health care site.

If anticipatory guidance and an opportunity for parents to discuss their concerns about their children's development are to be a routine part of the EPSDT evaluation, staffing patterns must allow sufficient time per child to make this possible. No amount of professional dedication and skill can compensate for the constraint of insufficient

time. It is difficult to imagine how a staff member who is scheduled to provide services for 7, or even 5 children in a two hour period can provide the level of services that can be provided by another staff member who can spend an hour with each child. As these two examples are from the public sector, they appear to reflect funding patterns and administrative priorities rather than those of the individual professional.

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DEVELOPMENTAL REVIEW, CONTINUING EDUCATION
and
EARLY AND PERIODIC SCREENING, DIAGNOSIS AND TREATMENT

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Participants: 1978 Meeting on the Report "Developmental Review in the EPSDT Program" with Minority Representative -

Participants: 1977 Conference on Developmental Review in the EPSDT Program

RESOLUTION*

Whereas the provision of developmental assessments and continuing care by health care providers under the Early and Periodic Screening, Diagnosis and Treatment Program expresses a national initiative, and

Whereas significant advances relating to the management of handicapping conditions, and the importance of early detection and early intervention, have occurred within the last decade, after many of the primary health care professionals now in practice completed their training, and

Whereas the literature which describes these advances is extensive but has neither appeared with frequency in the journals which reach the broadest segment of primary care professionals nor been systematically gathered and reviewed, and

Whereas more than 12 million children are eligible for services under the Early and Periodic Screening, Diagnosis and Treatment Program.

Therefore, be it resolved that all primary health care professionals should have access to, and should be encouraged to take part in, continuing education which can be expected to facilitate their providing appropriate developmental assessments, intervention, case management, and the coordination of services with educational/intervention programs which serve young children in the Early and Periodic Screening, Diagnosis and Treatment Program.

*Developed at the 1979 Conference on Continuing Education Issues in the Developmental Review Component of the EPSDT Program, which was organized by the American Association of Psychiatric Services for Children under Contract HCFA 500-77-0032.

INTRODUCTION

In 1967, Title XIX of the Social Security Act was amended to require states operating Medicaid Programs to provide health care services for all Medicaid eligible children under age 21. States were required to provide screening for physical and mental defects, diagnostic services for those children identified in the screening process, treatment as defined in the state's Medicaid plan, and outreach to eligible families to assist them in obtaining the services provided by the program. States also were given the responsibility to ensure that there are a sufficient number of participating providers to provide services for all eligible children. This amendment which signaled the beginning of the Early Periodic Screening, Diagnosis and Treatment (EPSDT) Program stands as an important milestone in our society's commitment to the health and well-being of all children.

The screening for the "mental defect" component of the program, however, has been controversial. Because of difficulties in implementing the developmental screening component of EPSDT, the Health Care Financing Administration (HCFA) sought assistance from the American Association of Psychiatric Services for Children (AAPSC) in developing strategies to improve the delivery of these services. Since 1977, working conferences have been carried out in order to address the developmental review process, the use of instrumentation in developmental assessment, minority issues, the involvement of parents, and various aspects of

training with respect to EPSDT. In addition, a field study of a set of developmental assessment procedures for use with infants and pre-school children was carried out.

This is the report of a Conference which was organized to develop strategies and to carry out the recommendations of previous working conferences on the need for continuing education of primary care professionals in the area of child development and developmental issues, to better implement developmental review in EPSDT. In the selection of conference participants, representatives from the primary health care professions and related disciplines of education, physical therapy, psychiatry, psychology, and speech pathology were included to provide an interdisciplinary perspective. Because a number of provider organizations and state EPSDT systems have been concerned with similar and related issues, representation from them specifically was sought for this working conference.

The goal of this conference was to recommend a coherent strategy for continuing education for EPSDT providers that could be implemented readily through existing and/or additional education resources.

Although the Conference was designed to address the continuing education of providers of developmental review services under the EPSDT Program, the recommendations have relevance to the continuing education of providers of primary care services for children from all socio-economic groups.

BACKGROUND ISSUES

The initial AAPSC EPSDT Conference in 1977 recommended a major revision in the original concept underlying the mandate to screen for "mental defect". Conference participants took a strong philosophic stand on developmental issues by proposing a "developmental review" process, a competency based model, in contrast to screening for defects, a deficit based model. The report of the 1977 Conference urged that the EPSDT Program through its developmental review services develop a system for the support of the development of children.¹

Consistent with this goal, many health care professionals assume such tasks as anticipatory guidance and health education. The recently released American Medical Association Monograph, "The Physician and the Mental Health of the Child"² identifies a range of possible physician involvement in the area of developmental assessment. At one end of the spectrum is a "minimal or basic approach", which consists of the medical history, regularly scheduled examinations of the well child, and brief developmental screening tests administered by the physician or another member of the office staff. The objective of this approach

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is to detect and make prompt referral of identified or suspected problems. At the other end of the range is an "extended approach" in which the professional is actively engaged in both assessment and intervention.

AAPSC contract activities have led to the development of a set of a developmental assessment procedures which are more nearly the "intermediate approach". This includes, in addition to the history and physical examination of the child, a determination of the developmental milestones which the child has reached, a structured interview to elicit parent questions and concerns, and the provision of anticipatory guidance for the child who is functioning within the expected range. It is expected that identified or suspected developmental problems will be referred for additional services in the majority of instances.

Developmental review has the function of assessing and supporting the ways in which development is occurring, and it is predicated upon parent involvement as well as assessments of the child by nurses or physicians. The parent is considered to be both a source of information about the child's functioning in his or her usual environment and a resource for the support of the child's development. In infants and preschool children, for whom the health care system and family systems are the principal resources for monitoring development, the parent-child dyad is inseparable. It follows that parent involvement must be the cornerstone of the developmental review process. This process

should begin prenatally with health education by primary health care providers and extended throughout childhood.

Recognition of the importance of the training of health care providers in developmental issues is reflected in the emergence within the past decade of the specialty of developmental pediatrics and that of the pediatric nurse practitioner. During this same period, major advances in the management of handicapping conditions have occurred. Changing social policy toward handicapping conditions has led to the requirement under PL 94-142 that all handicapped children are entitled to a free public education in the least restrictive environment afforded by the public schools. However, the training of many primary care providers now in practice preceded these developments. Also, many were trained principally in emergency and episodic care.³ Training issues therefore are a significant concern in efforts to facilitate the delivery of developmental review under the EPSDT system.

The EPSDT Program offers the opportunity for a healthy start for the children who are eligible for its services. Enhancing the development of our nation's children and preventing developmental problems, as well as early identification and intervention in handicapping conditions, should be major goals of the EPSDT Program. Training of ESPDT providers must make it possible for these goals to be achieved.

3. Kempe, C. Henry, The Future of Pediatric Education: A Report by the Task Force on Pediatric Education, 1978.

DEVELOPING A CONTINUING EDUCATION STRATEGY FOR HEALTH CARE PROVIDERS

TRAINING CONSIDERATIONS

There was agreement among conference participants that the developmental review component of EPSDT for infants and preschool children should be accomplished through already existing health care systems. The need for periodic health assessments in infancy and in the preschool years leads to the conclusion that the health care system provider is the appropriate formal resource for monitoring development in this age group. Present health systems include as primary care providers family practitioners, nurses, pediatricians, pediatric nurse practitioners, and physicians' assistants. Continuing education efforts should be focused on these professionals.

The responsibility for developmental review extends beyond the health care system, however. EPSDT providers should be able to develop working relationships with educational and other human resource programs for the benefit of their patients, and, in turn, the converse should be possible. Training

related to facilitating these linkages should be an objective, as a part of continuing education training of primary health care providers.

Because of the complexity of development, continuing education must be interdisciplinary in its conception and implementation.

To understand the needs of any child requires a breadth of developmental knowledge and an understanding of the potential contribution of the various health and health related professions to enhancing the child's developmental potential. Continuing education must extend beyond the developmental review process to an appreciation of approaches to intervention.

A particular emphasis in the training of EPSDT providers should be the recognition of the role of parents as the primary care givers. Parent involvement is crucial to the developmental review process as well as to any subsequent intervention, when this is re-

quired. Training should develop professional skills which would facilitate increasing parents' knowledge of normal development, health, and intervention alternatives. Sensitivity to cultural differences and tolerance for both cultural and biological diversity should be important training goals for professionals, to facilitate their work with parents.

Although continuing education for EPSDT providers involved with developmental review is necessary and valuable, the barriers to accomplishing this training must be considered in the developing of recommendations and strategies. Providers' interest in receiving training, incentives for training, and the cost of training represent serious considerations for program development.

SITES FOR CONTINUING EDUCATION

Training could be accomplished through professional organization contracts with existing universities, through University Affiliated Facilities for the Developmentally Disabled, and health professional

schools. The Academy of Pediatrics, the Academy of Family Practitioners, the Society for Ambulatory Pediatrics, The American Nurses Association, and the American Medical Association should be encouraged to develop these programs as part of their continuing education activities. Continuing education credits should be offered for participation in the training.

TRAINING FORMATS

Continuing education for health care providers of developmental review in EPSDT initially should focus on physicians and nurses in separate, but similarly designed programs. Although it would be desirable to provide training over a period of weeks, the majority of the professionals whom this program is designed to reach could not be expected to commit large blocks of time to training, because of existing professionals responsibilities.

It would be useful to offer alternative methods of dissemination for the basic content. Brief (2 - 2 1/2 days duration) seminars

could be organized and presented to professionals in different parts of the country. Training modeules could be developed for use in ongoing in-service training activities at state or local levels. Didactic materials, handouts, pamphlets, audio-visual training materials could be developed and distributed to program developers at cost. Printed materials should be provided in a three ring loose-leaf notebook form for updating purposes.

The funding, through a contract or grant, of a resource facility at the national level would greatly enhance the training possibilities for programs in the present and for continuing dissemination of new information in the future. A mechanism should be developed to permit access of past trainees to the resources of the center and to information regularly disseminated by the center. The center also would serve as a resource to program planners.

RANGE OF TRAINING NEEDS

A professional's competency needs would be contingent on the tasks which the professional would be expected to carry out. At a provider site which is located near comprehensive assessment and intervention resources for developmentally delayed infants and preschool children, in the area with little cultural diversity, the professional's needs for skills and knowledge would differ from those of a professional in an area with no assessment or intervention and with a culturally heterogeneous target population. The professional who is working in a low resource area would require additional training related to functioning in some capacity in the intervention process. This could consist of adding specialists to his/her staff to provide some services on-site, or acting as a coordinator of the child's intervention program. Professionals who work with members of minority sub-groups should have training which develops in them a sensitivity to and tolerance for cultural diversity.

Within a provider site, a single professional or team of two or more professionals may be responsible for the developmental review. Again, competency needs would be related to the specific tasks of the professional - parent interview, assessment of the child's functioning, interpretation of findings, discussion with the parent of the child's functioning, parent concerns or questions, or the provision of anticipatory guidance and health education.

The organization of training should be task oriented and should permit trainees to develop individual educational plans which meet their own work-related requirements. A basic curriculum could, then, be supplemented by enrichment in special areas; such as, interdisciplinary role functioning, inter-agency linkages, minority cultures, assessment instruments, etc.

CONTENT OF TRAINING

TRAINING AREAS

The 1978 AAPSC EPSDT working conferences on training issues recommended that five major contents areas be covered in the training of health care professionals for developmental review. These are:

- o basic child development
- o developmental assessment
- o interviewing and listening skills
- o treatment and intervention perspective
- o interdisciplinary role functioning and linkage across systems .

Participants at the 1979 Conference on Continuing Education agreed that these were the major content areas to be covered and affirmed the need for interdisciplinary collaboration on the development of curricula.

TRAINING GOALS

The goal of continuing education training should be development by participating professionals of a set of competencies essential to the provision of developmental review services.

4. Horowitz, Frances Degen, Ph.D., Working Conference on Training Issues in the Developmental Review Component of the EPSDT Program. American Association of Psychiatric Services for Children. 1978.

It was the purpose of the conference to develop curricula or to precisely define educational objectives. However, participants were in agreement about the need for evaluation to be a component of the design of educational programs.

TRAINING OUTCOMES

Training should assist each professional to enhance/develop the capability -

1. to be skilled in understanding and communicating with families from diverse social, cultural and economic backgrounds, for the purposes of obtain information and providing information and assistance;
2. to observe and elicit child behaviors as is necessary to determine the child's current developmental status (this includes developmental milestones, temperament, behavior);
3. to utilize selected strategies in determining the significance of developmental findings (developmental tests, developmental maps, clinical judgment, etc.);

4. to understand current knowledge of the factors which may influence the development of children who fall within the normal range, those who do not, and those at risk of having development problems;
5. to provide anticipatory guidance and health education;
6. to understand treatment and intervention perspectives which reflect recent advances in the management of handicapping conditions;
7. to communicate and collaborate with other professionals who may be providing services for the child and the family (for example, audiologists, educators, nutritionists, occupational therapists, physical therapists, psychiatrists, psychologists, social workers, and speech therapists, as well as professionals from other medical and nursing specialties).

BARRIERS

In the development of curricula, consideration also must be given to a number of barriers which may operate to hinder the delivery of developmental review services. Among these are the following:

1. the effect of prior training fostering in professionals the concept that there is clear demarcation between normality and abnormality in the area of development;
2. professional roles which do not promote sharing responsibility with parents, considering parents the principal educators of their child or, in the case of children who require special services, becoming members of the intervention team;
3. the problems of communication which occur between disciplines.

RECOMMENDATIONS AND ACTION STEPS

1. Continuing education program should be developed and implemented for primary health care providers in developmental review for EPSDT.
2. Centers for participation in such training programs should be developed through professional organizations, university affiliated facilities for the developmentally disabled, and health professional schools.
3. ^{Funding} A-fund should be made available through the contract or grant mechanisms to establish a Technical Assistance and Information Center for Child Development Services to support this training effort as well as to assist in providing better linkages of programs for young children.
4. The resolutions put forward by this group should be forwarded to appropriate professionals associations in order to facilitate their endorsement of the principle of continuing education for EPSDT providers in developmental review.
5. The proceedings of this conference should be widely disseminated.
6. The strategies developed during this working conference should be further expanded and implemented. Continued input of this working committee would be desirable for continuity.
7. An Advisory Board on training issues for EPSDT should be established in the health care financing administration of HEW. All participants at this conference indicate a willingness to serve if called.

8. A campaign for public awareness of EPSDT developmental review and referral services should be initiated in all states.
9. Adequate and timely reimbursement should be provided for developmental review, anticipatory guidance, health education, and related intervention, to ensure the provision of services of high quality.

APPENDIX A

PROCEDURES FOR THE ASSESSMENT AND REVIEW OF DEVELOPMENT (PARD)

MANUAL

Developed by:

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Under Contract #HCFA 500-77-0032

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INSTRUCTIONS FOR REVIEW OF PARENT QUESTIONS/CONCERNS

FORM A

This step in the assessment provides the parent with an opportunity to:

1. Raise questions and express concerns about the child's health, development, and behavior.
2. Describe the child's personality.
3. Comment on the child's feelings about himself/herself and about other people.
4. Talk about the child's strong points/assets.

This information provides the professional with a starting point based upon the parent's perception of the child's abilities and functioning and the parent's concerns and questions about the child. These questions or concerns should be the focus of the professional's initial contact with the parent and child. This makes it possible to begin the developmental review process by recognizing the "parent's agenda" and by utilizing the parent's knowledge of the child. It follows that the parent's cooperation and trust in participating in the developmental assessment process will be enlisted more readily if the examiner responds to the parent's concern about his/her child.

This interaction sets the stage for the continuing interview with the parent concerning the child's development. Information generated in this part of the assessment supplements that obtained from the sequences of developmental items which are recorded on Form B.

INSTRUCTIONS FOR
INTERVIEW WITH THE PARENT REGARDING THE CHILD'S DEVELOPMENT
FORM B: "R" COLUMNS

The assumption is that this interview with the parent (or caretaker) will be performed in relation to the physical examination by the health professional or another qualified person.

The parent should read DOWN each sequence of behaviors with the staff member who is carrying out the interview (i.e., the interview should not be conducted by calling out a series of questions regarding the child's behavior in the home).

* * * * *

This step in the assessment (a) provides the parent with an opportunity to describe his/her child's behavior in five areas: Gross Motor, Fine Motor, Language, Self-Help, and Social-Emotional.

(b) provides an opportunity for the parent to increase his/her understanding of the behaviors which usually can be expected to follow those behaviors which the child already has acquired.

Form B provides space for recording the parent's description of the child's development in the R columns (R = Reported), with the behavioral items arranged in developmental order in five domains, as follows:

Gross Motor Development (Postural control, Locomotion, Coordination of large body movements).

Fine Motor Development (Manipulative skills. Eye-hand coordination)

Language Development (Vocalization and gradual differentiation of sound [infancy]. Understanding the speech of others. Ability to use words, phrases and sentences, to express wants, feelings and ideas. Use of symbols. Articulation of sounds.)

Self Help (Development of ability to do things for himself/herself. Learning to take care of himself/herself.

Social-Emotional Development (Responses to and relationships with others. Adaptation to social environment. Awareness of self and others. Emotional expressiveness.)

These lists facilitate the interview with the parent, and assist in eliciting information about particular behaviors which may not spontaneously reported by parent.

INTERVIEW WITH THE PARENT REGARDING THE CHILD'S DEVELOPMENT

The interview should be a positive experience for the parent in which he/she is invited to share and describe what his/her child is doing and learning.

1. The interview begins by asking some general question about what the child is doing currently, for example:

"Tell me, what is John doing these days?"

"What has Jean been learning to do?"

Then allow the parent time to describe the child in his/her own way.

2. Next, inquire into a specific area, beginning with a general question, for example, in the gross motor area, "Tell me more about about how Jack is getting around?"
3. Follow up with specific questions in this area to define current activities in a more specific way, for example:

"Is he walking by himself yet?"

4. From this, proceed down the sequence of behaviors (in this example, Gross Motor) until the most complex behavior reported by the parent has been checked.
5. Begin questioning about another area.

GUIDELINES FOR
THE PROFESSIONAL'S OBSERVATION OF THE CHILD'S BEHAVIOR
FORM B: "O" COLUMNS

Form B also provides space for recording the professional's observation of the child's development (O columns), adjacent to those reported by the parent.

Observations of the child's spontaneous behavior provide a rich source of information about his/her abilities. Play materials and toys appropriate for children of various ages can stimulate activities of the child which reveal his/her skills and comprehension by the way he/she utilizes them. The child's play can be observed by staff initially in the waiting area and later during the professional's interactions with the child. Examples of expressive language behavior and social interaction with the mother and staff also can be observed.

Information about physical activity (walking, running, climbing) and coordination should be readily available. Manipulative skills (eye-hand coordination) will have to be assessed by providing materials such as paper and pencil, blocks, toys, etc.

As the professional interacts with the child, he/she can obtain valuable developmental information in an informal way. For example, language comprehension can be appreciated by the child's responses to the professional's directions and questions during the physical exam.

Areas of development such as self-help skills and some aspects of social adaption (example: play with peers), are best defined by the child's daily behavior at home, etc., as reported by the parent.

It should be remembered that young children may "underbehave" or "misbehave" in a strange situation, so that their behavior in the office/clinic situation may not be representative of their typical activities, abilities, and adjustment.

INSTRUCTIONS FOR THE USE OF THE DEVELOPMENTAL MAP

The Developmental Map includes five major areas of development and pictures the course of development (sequence of behaviors) in each area for the first five years. Behaviors are assigned to age intervals during which most children acquire the behavior described. For example, "Walks alone" in the 12-18 month interval. Most children establish this behavior during this age interval. These age interval assignments can only be considered approximate. It must be emphasized strongly that this developmental map is nothing more than a general synthesis of behaviors which have been observed to occur on the average among children in the United States within particular age intervals. The Developmental Map should aid in determining whether a child's development in each area is "Advanced, Within Age Expectations, Questionable, or Definitely Delayed". It can assist the professional to be systematic in assessing for possible discrepancies between the child's age and the child's behavioral age level.

When compared to children of their own age, some children will be behaving in advance of the majority of children, most will fall within a range characteristic for their age, some will lag behind the majority of children, and a small number will be grossly delayed as compared with the expectations for their age.

In the Gross Motor area, a child of 9 months who "walks alone" would be described as "advanced" or "doing well" because most children that age are not walking, i.e., he is behaving like an older child. A child of 12-15 months who is walking alone would be described as "within age expectations," or "doing well" because this is when most children walk. A child of 15-18 months who is not walking would display "questionable development" because most children are walking by this age. A child of 2 years who is not walking would be considered "definitely delayed" because the overwhelming majority of children are walking by age 2. He/she can be considered to be about 50% delayed; that is, at age 2 he is not displaying the behavior of a one year old.

In the Language area, a child of 15 months who "talks in short sentences" (2-3 word phrases) could be described as "advanced," because most children of that age do not. A child of 18 to 24 months who talks in short sentences would be described as "within age expectations," because this is the age range when most children do this. A child of 30 months who is not using word combinations would display "questionable development," because most children are doing so by this age. S/he is about 50% below age; that is, at age 3, he is not displaying the behavior of an 18-24 month old.

In the Self-Help domain, a 2 1/2 year old child who was "dressing and undressing without help" would be described as "advanced," as most children that age are not doing so. A child age 3 to 5 who was dressing independently would be considered "with age expectations" as this is the age range within which most children learn to do so.

DEVELOPMENTAL MAP

AGE		GROSS MOTOR DEVELOPMENT		FINE MOTOR DEVELOPMENT		LANGUAGE DEVELOPMENT		SELF HELP		SOCIAL-EMOTIONAL DEVELOPMENT	
months)											
-	4	lifts head and chest when lying on stomach	claps hands together when lying on back	reaches toward objects when lying on back	responds to sounds (hinks, startles, stops activity, etc.)	makes sounds, coos, chuckles responsively	comforts self with thumb or pacifier	responds positively to being held by parent (smiles, stops crying, etc.)	smiles spontaneously	appears interested in looking at mother's face	distinguishes mother from others, responds most strongly to her
-	6	rolls from back to front	picks up objects with thumb and palm	passes toy from one hand to other	has a wide range of sounds (vowel sounds, consonant-vowel combinations—"oh," "bye," etc.)	says "mama," "dada," or other similar sounds	plays with own hands, touching them together	actively initiates social contact by smiling and making sounds	pushes away someone or something she or he doesn't want		
-	9	pulls self to standing									
-	12	sits alone (erect and steady) without support when placed in sitting position	picks up and holds two toys at the same time	picks up small objects (bits of cereal, raisin, etc.) with precise thumb and finger grasp	locates source of (turns to) soft sounds	says "mama," "dada," or other similar sounds as names for parents	learns about things by touching, putting things into mouth, dropping toys, etc.	attempts to move across room to reach toys	holds own bottle or drinks from cup	plays social games (peek-a-boo, pat-a-cake, waving good-bye, etc.)	expresses several feelings clearly (anger, fear, sadness, pleasure, etc.)
-	18	walks with support			understands "no," "stop," etc. from parents' tone of voice					objects to separating from parent	
-	24	walks alone	stacks two blocks, cans, or like objects	scribbles with crayon or pencil	uses 2 words as names of things or actions ("go," "eat," etc.)	points to familiar things (bottle, cup, dog, etc.)	cooperates in dressing (pushes foot into shoe, arm into shirt, etc.)	plays simple ball games (rolls ball back and forth, etc.)	hugs parent		
-	36	"dances" in response to music			points to two parts of own body when asked to do so		leads self with spoon (some spilling)				
-	48	runs well, rarely falls	builds towers of four blocks, cans, or like objects	imitates marks with crayon (up and down marks, round marks)	uses words to make wants known	uses 2 word sentences or phrases	indicates wants by pointing, pulling, or using words	kisses with pucker	imitates familiar adult actions (house-work, etc.)	"helps" with simple household tasks (picks up toys, dish, etc.)	
-	60	kicks ball forward			points to pictures of familiar objects (identifies pictures of objects)	follows simple directions	eats with spoon, spilling little	puts on simple garment (slipper, cap, etc.)	refers to self as "I" or "me"	can tell first and last name	plays near other children
-	72	jumps (gets both feet off ground)	holds crayon with fingers (like adult grasp)	handles small toys (beads, pegs, etc.) skillfully	uses pronouns for self and other (I, me, you, etc.)	talks in sentences some of the time	speech is understandable half the time	washes and dries hands	sometimes acts in a sympathetic way to others		
-	84	rides tricycle, using pedals (if has had one to ride)	draws (copies) a complete circle		tells what at least 2 familiar objects are used for (ball, spoon, etc.)		is toilet trained	puts on simple garment (slipper, cap, etc.)			
-	96	walks up and down stairs alone, one foot to a step	draws a person that has at least 3 parts (eyes, nose, mouth, body, arms, legs, hands, feet, etc.)	draws (copies) a picture of a cross (+)	tells stories about daily experiences	knows 3 colors	washes and dries hands and face	combs or brushes hair as well as hair style permits	knows own sex and that of others	plays cooperatively with others	
-	108	hops on one foot, without support			understands concepts (big, little, etc.)	understands 2 prepositions (on, in, under, etc.)					
-	120	can stand on one foot about 5 seconds			counts 4 objects, answers "How many?"						
-	132	skips	draws a person that has at least 6 parts	draws a square with good corners	talks in sentences	completely understandable, with some mistakes in pronunciation (articulation)	dresses and undresses without help, except for tying shoes			plays role he or she chooses or role others ask him/her to play in "make believe" play	follows simple rules of games (hide and seek, Simon says, etc.)
-	144	hops on one foot repeatedly, with good coordination	draws a person that has at least 6 parts	draws a square with good corners	defines familiar words according to use (ball—"to play with," hat—"to put on head," etc.)						
-	156	dances skillfully (varied movements in rhythm with music)	prints a few letters								
-	168	good balance and coordination in active play									

INTERPRETATION OF DEVELOPMENTAL REVIEW DATA/DECISIONS REGARDING FOLLOW-UP

Interpretations about the child's development are based upon: (1) The parent's report of the child's activities and the parent's concerns and questions about the child's development; (2) The professional's observations of the child at the time of the developmental assessment.

Interpretations about the child's development should be made separately for each area of development because the child's level or rate of development may vary from area to area. Further, in the language area, separate judgements must be made about expressive language, speech articulation (understanding-ability), and language comprehension.

Interpretations are based on judgements about the congruence or discrepancy between the child's actual age and his approximate behavioral age, that is, the maturity of his behavior. Such judgements, to be well-founded, must be based on a clear perception of: (a) the child's age, in years and months; (b) the child's behavioral age - how mature the child usually behaves in a given area of development; (c) the congruence or degree of discrepancy between his chronological age and his behavioral age in each area of development.

Assessments of the child's development compare the behavioral age level which the child has attained in a given area to his actual age level. Within this framework, a child may be judged to show development which is: (a) advanced; (b) within age expectations (within age range); (c) questionable; (d) definitely delayed.

Interpretations basically are decisions regarding the need for (a) additional assessment and/or (b) therapeutic or educational intervention to provide additional support for the child's development.

At this point, it is critical to stress the two errors that can occur in developmental review. First is "the leniency error", in which a child whose development is questionable, in one or more areas, is misidentified as developing within expectations for age. Such a child is then denied the benefit of the followup resources which he or she needs.

The second error is "the pathology error", that is, mislabeling as "deviant" a child whose development is within expectations for his age. It is critical to minimize both of these errors! In questionable cases it is wisest to proceed to further assessment to obtain additional information to assist in the decision making process.

INTERPRETATION - STEPS

1. Calculate the child's age; subtract the child's birthdate from the date the Developmental Review was completed. See example below: The Child has passed the age of 3 years, 1 month, but is not yet 3 years, 2 months. His age is recorded as 3-1. Drop the days after calculating the age, not before. For comparison with the Developmental Map, record age in months. For example, 3 years, 1 month is recorded as 37 months.

DATE	Year	Month	Day
	<u>1978</u>	<u>6</u>	<u>38</u>
	<u>1975</u>	<u>5</u>	<u>14</u>
	<u>3</u>	<u>1</u>	<u>24</u> (37 MONTHS)

2. Place a horizontal marker across the Developmental Map at the child's age level.
3. For each area of development, note on Form B the individual items reported by the parent and/or observation in the clinic/office.
4. For each area of development, compare the behaviors the child has achieved (Form B) with those usually achieved by a child at his actual age level (Developmental Map). In this way, it is possible to appreciate whether the child's behavior is within age expectations.
5. Use the following developmental status categories to designate whether the child, in each area, is:
 - A = Advanced - Displays behavior characteristic of children significantly older than himself--behavior above age interval.
 - WA = Within age expectations - displays behavior at age interval or within age range (one interval below).
 - Q = Questionable development - Displays behavior at a level which is less mature than children significantly younger than himself. Fails to demonstrate behaviors within his age interval and fails to demonstrate behaviors at the next younger age interval. For example, a 13 month-old who is not walking (13-18 months) and not crawling (9-12 months).
 - DD = Definitely delayed - Over 50% delayed, for example, a 2 year old who is displaying the behavior of a 1 year old; example, a 2 year old who is not walking, a 4 year old who is not using word combinations, etc.

DECISIONS BASED UPON THE STAGE I/II DEVELOPMENTAL REVIEW

There is no simple formula for interpretation and decision making. Decisions should be made in the context of a review of all available information. This will include a minimum, information received in talking with the parent, the information recorded on Forms A & B, observations of child-parent and child-staff interactions, observations of the child's use of play materials, and relevant findings on the physical examination. Developmental review is the task of professionals, not technicians, because of the complexities and subtleties of child development and the critical nature of the task.

For any child who shows questionable behavior in any area, it is critical that the child not be lost and follow-up delayed. The degree of developmental delay, the resources available to the child in the home, and the geographical proximity of assessment and intervention resources, will influence the choice of recommendations. Ready access to consultants (neurodevelopmental, psychiatric, psychological, special education, speech, etc.) which permits discussion of the child's possible problems and needs, will facilitate decision making at the time of the initial Stage I/II Review.

In instances of questionable development, it may be appropriate to suggest activities which may be expected to enhance the child's development, and to have the parent and child return for another assessment in two to three months. The findings at that time will determine if there is a need to refer the child in order to obtain a more comprehensive assessment (a Stage III review). In other instances, developmental problems may be clearly evident, and there is no question about the need for additional, more comprehensive assessments and intervention, to support the child's development.

Staff in the primary health care site should be familiar with geographically accessible early childhood intervention programs as well as with more traditional medical resources.

GUIDELINES FOR
DISCUSSION OF CHILD'S DEVELOPMENT WITH PARENT(S)
(INTERPRETATIVE INTERVIEW AND PROVISION OF ANTICIPATORY GUIDANCE)

The point of departure for this discussion is the parent's perception of the child and his/her questions or concerns about the child. The professional should summarize the parent's report of the child's development and of the parent's concerns, and then add his/her professional observations about the child's functioning. This interview moves from the level of description (what the child is and is not doing) to interpretation (what this might mean with respect to the child's development) to recommendations (what can be expected to be helpful for the child at this stage of his/her development). It is helpful to begin by acknowledging the child's strengths and most mature areas of development before raising questions about areas that are less mature. It is important to remember that a parent may suffer a sense of loss or injury because of the professional's comments about child.

If the parent feels that the child's development is proceeding satisfactorily, and the professional's observations indicate development within the expected range, anticipatory guidance should be provided and the parent asked to return with the child within the regular periodicity schedule for assessments.

If advanced development in one or more areas is observed, the parent should be informed and plans should be made to support the advanced development (in the home, and as indicated with special instruction, etc.)

If the parent and the professional find that the child's development is definitely delayed in one or more areas, the professional should discuss with the parent some of the resources which may be helpful to him/her in supporting the child's development. Referrals for additional assessments and indicated therapy (speech therapy, special education, neurodevelopmental therapy, etc.) should be made, as indicated.

Responsibility for monitoring of the treatment plan should be planned also, in the event that referral to an intervention center is not possible.

DISCUSSION OF CHILD'S DEVELOPMENT WITH PARENT(S)

If the parent and the professional do not agree as to whether or not there is a degree of developmental delay, further discussion should enable the professional to determine the reason for this difference in perceptions.

Possible causes include the following:

1. The child has demonstrated behaviorally a higher level of maturation in the home than the professional could elicit in the office, because of the child's discomfort in a strange setting and lack of familiarity with the professional. Clinical judgement should make it possible to determine if it is necessary to repeat the assessment in two to three months in order to decide if the child's functioning is within the expected range.
2. Cultural factors have led to parent expectations of the child (i.e., expectations of what constitutes "normal" behavior at that age) which differ from those of the professional. When this occurs, it should be helpful to discuss some of the parent's and some of the professional's expectations of what children should be able to do when they reach the age of the child. The professional's sensitivity to and acceptance of cultural differences will assist him/her to avoid considering cultural differences to be an indication of developmental problems in the child. At the same time, the discussion can lead to the provision of useful information to the parent about expectations others may have for his/her child's functioning in the larger community.
3. The parent is frightened by the possibility that the child has some type of problem. When this occurs, considerable professional skill is required to maintain rapport and to handle the situation in such a way that the child will have access to the services that he/she may need. This becomes a matter of professional sensitivity and expertise which is beyond any simple recommendation for management. Maintaining the focus on ways to help the child rather than insisting that the parent acknowledge the problems in the child is more likely to lead to a productive resolution of this problem situation.

It is important to remember in all of the above instances, that the Developmental Review Process should be accomplished in such a way that it facilitates the child's development and supports the parents' self esteem and parenting skills.

PROCEDURAL CHART FOR FIELD STUDY

PARD

STEP	IF	THEN	NOTE:
1. Parent completes Form A and the R columns of Form B	If parent is unable to read forms	then designated staff member reads forms with parent and assists in their completion	<p>Note:</p> <p>Form B is designed to be completed by reading DOWN each column</p> <p>Preferred procedure is for parent and staff to complete forms together</p> <p>See pages 1, 2, and 3 of the Manual</p>
	If parent can read and understand forms	then parent <u>may</u> complete forms independently; i.e., staff assistance may be limited to answering questions about the intent of questions or the meaning of words	
	If Spanish is the language spoken in the home	then the Spanish translation of forms A and B should be used as described above. In the event of the absence of a bi-lingual, bi-cultural staff member, mispronounced Spanish is preferred to clearly articulated English	

STEP	IF	THEN	NOTE
2. <u>Professional</u> observes the child in the context of the physical examination and completes the <u>0</u> columns of Form B	If determinations re some behaviors can <u>/not/</u> be made in the physical examination of the child (example: "draws a circle")	then materials and toys appropriate to the child's level of development should be used to complete the observation of the child's development	Note: Particular attention should be paid to the behaviors just above and below the <u>last</u> behavior checked by the parent in each R column, and to any omissions in a sequence of checked behaviors See page 4 of Manual
	If the child's cooperation can <u>/not/</u> be obtained (child appears frightened or is physically ill)	then the developmental assessment component of the examination should be rescheduled	
3. <u>Professional</u> reviews relevant data to determine the level of functioning of the child in each developmental area and records his/her findings below each column of Form B			See pages 5, 6, 7, 8, 9 of the Manual
4. <u>Parent</u> receives his/her copy of the completed Form B (3rd copy)			
5. <u>Professional</u> and <u>parent</u> discuss the child's development and needs and determine the actions which appear to be indicated to support the child's development			See pages 10 and 11 of the Manual
6. <u>Parent</u> is asked to complete the Parent Questionnaire (green) and place it in the container designated for this purpose			
7. The top copies of Forms A and B are removed from the child's chart and placed in the storage area designated for this purpose (these are the copies with the code numbers).			
8. The yellow and blue forms are completed and handled as they were in the first (control) portion of the Field Study.			

If there are any questions call Dr. Nancy Stone collect at 202-659-9115. Thank you.

Procedures for the Assessment and Review of Development: Form B

Directions to parents: Read DOWN each section of this form, placing a check in the *R* column beside each behavior that your child has developed. When you have checked all of the behaviors in that section that your child has developed, continue with the next section. If your child is more than 2 years old, you may start checking below the • mark.

name of child

address: street

city

date

— TEAR HERE —

GROSS MOTOR DEVELOPMENT

	R	O
• lifts head and chest when lying on stomach		
• supports head (no lag) when pulled to sitting position		
• rolls from back to front		
• sits alone (erect and steady) without support when placed in sitting position		
• pulls self to standing		
• crawls on hands and knees		
• stands alone well		
• walks with support		
• walks alone		
• "dances" in response to music		
• runs well, rarely falls		
• kicks ball forward		
• jumps (gets both feet off ground)		
• rides tricycle, using pedals (if has had one to ride)		
• walks up and down stairs alone, one foot to a step		
• hops on one foot, without support		
• can stand on one foot about 5 seconds		
• skips		
• hops on one foot repeatedly, with good coordination		
• dances skillfully (varied movements in rhythm with music)		
• good balance and coordination in active play		

FINE MOTOR DEVELOPMENT

	R	O
• clasps hands together when lying on back		
• reaches toward objects when lying on back		
• reaches out and picks up toy with one hand when sitting		
• picks up objects with thumb and palm		
• passes toy from one hand to other		
• picks up and holds two toys at the same time		
• picks up small objects (bits of cereal, raisin, etc.) with precise thumb and finger grasp		
• stacks two blocks, cans, or like objects		
• scribbles with crayon or pencil		
• builds towers of four blocks, cans, or like objects		
• imitates marks with crayon (up and down marks, round marks)		
• holds crayon with fingers (like adult grasp)		
• handles small toys (beads, pegs, etc.) skillfully		
• draws (copies) a complete circle		
• draws a person that has at least 3 parts (eyes, nose, mouth, body, arms, legs, hands, feet, etc.)		
• draws (copies) a picture of a cross (+)		
• draws a person that has at least 6 parts		
• draws a square with good corners		
• prints a few letters		

LANGUAGE DEVELOPMENT

	R	O
• responds to sounds (blinks, startles, stops activity, etc.)		
• makes sounds, coos, chuckles responsively		
• makes sounds spontaneously and to make contact with people (social contact)		
• has a wide range of sounds (vowel sounds, consonant-vowel combinations—"oh," "bye," etc.)		
• says "mama," "dada," or other similar sounds		
• locates source of (turns to) soft sounds		
• says "mama," "dada," or other similar sounds as names for parents		
• understands "no," "stop," etc. from parents' tone of voice		
• uses 2 words as names of things or actions ("go," "eat," etc.)		
• points to familiar things (bottle, cup, dog, etc.)		
• points to two parts of own body when asked to do so		
• uses words to make wants known		
• uses 2 word sentences or phrases		
• points to pictures of familiar objects (identifies pictures of objects)		
• follows simple directions		
• uses pronouns for self and other (I, me, you, etc.)		
• talks in sentences some of the time		
• speech is understandable half the time		
• tells what at least 2 familiar objects are used for (ball, spoon, etc.)		
• tells stories about daily experiences		
• knows 3 colors		
• understands concepts (big, little, etc.)		
• understands 2 prepositions (on, in, under, etc.)		
• counts 4 objects, answers "How many?"		
• talks in sentences		
• completely understandable, with some mistakes in pronunciation (articulation)		
• defines familiar words according to use (ball—"to play with," hat—"to put on head," etc.)		

SELF HELP

	R	O
• comforts self with thumb or pacifier		
• plays with own hands, touching them together		
• feeds self cracker		
• learns about things by touching, putting things into mouth, dropping toys, etc.		
• attempts to move across room to reach toys		
• holds own bottle or drinks from cup		
• cooperates in dressing (pushes foot into shoe, arm into shirt, etc.)		
• feeds self with spoon (some spilling)		
• indicates wants by pointing, pulling, or using words		
• eats with spoon, spilling little		
• puts on simple garment (slipper, cap, etc.)		
• washes and dries hands		
• is toilet trained		
• washes and dries hands and face		
• combs or brushes hair as well as hair style permits		
• dresses and undresses without help, except for tying shoes		

SOCIAL-EMOTIONAL DEVELOPMENT

	R	O
• responds positively to being held by parent (smiles, stops crying, etc.)		
• smiles spontaneously		
• appears interested in looking at mother's face		
• distinguishes mother from others, responds most strongly to her		
• actively initiates social contact by smiling and making sounds		
• pushes away someone or something she or he doesn't want		
• plays social games (peek-a-boo, pat-a-cake, waving good-bye, etc.)		
• expresses several feelings clearly (anger, fear, sadness, pleasure, etc.)		
• objects to separating from parent		
• plays simple ball games (rolls ball back and forth, etc.)		
• hugs parent		
• kisses with pucker		
• imitates familiar adult actions (housework, etc.)		
• "helps" with simple household tasks (picks up toys, dish, etc.)		
• refers to self as "I" or "me"		
• can tell first and last name		
• plays near other children		
• sometimes acts in a sympathetic way to others		
• knows own sex and that of others		
• plays cooperatively with others		
• plays role he or she chooses or role others ask him/her to play in "make believe" play		
• follows simple rules of games (hide and seek, Simon says, etc.)		

name of child _____ address: street _____

city _____ state _____ zip _____ name of person completing this form _____

TEAR HERE

child's date of birth: _____ today's date _____
 month day year month day year

child's sex: M F

child's race/ethnicity: Hispanic Non-Hispanic: White Black Native American Asian

Directions: Please share with us how your child looks to you. This is *not* a test. It will not lead to a score. It is a way for you to tell us some of the things that you know about your child. After you finish, you can talk about these questions and ask any other questions that you may have about your child's development.

Do you have any questions or worries about your child as to:

Please check all of the words that seem to describe your child. (leave blank those that do not)

	yes	no	not sure
height.....			
weight			
health.....			
eating.....			
sleeping.....			
amount of crying			
ability to move around (crawl, walk, run, etc.)			
use of hands (playing with blocks, beads, pegs, use of spoon, fork, etc.)			
ability to see clearly			
ability to hear			
ability to listen and understand what is said to him/her.....			
ability to let you know what she/he wants (without or with words)			
talking (words, sentences)			
ability to speak so others outside of family can understand him/her.....			
learning.....			
giving and receiving affection (love)			
playing and getting along with others			
feeding himself/herself.....			
dressing himself/herself.....			
toilet training.....			

full of energy _____ very sensitive _____ easy to care for _____
 playful _____ rocks back and forth a lot of the time _____ clinging _____
 shy _____ likes to please _____
 affectionate _____ fight _____ sad, unhappy _____
 loving _____ babyish _____ hard to handle _____
 curious _____ good natured, happy _____ not much energy _____
 too active _____ easily excited _____ fearful _____
 shows little interest in people _____ hot temper _____ likes to hit head against wall or bed _____
 helpful _____ does not obey very well _____ friendly _____

other (add your own words) _____

Do you have any questions or worries about your child as to anything checked above?

yes _____ no _____ not sure _____

relationship to child of person completing this form: _____

What are your child's strengths? (special, good things)

How do you think your child feels about himself/herself (sure of himself/herself, little confidence, does not think much of himself, afraid, etc.)?

How does your child seem to feel about others (children he/she plays with, family, neighbors, teachers, etc.) — is friendly, unfriendly, cares about how they feel, etc.?

Do you have any other questions or worries that you would like to ask about?

Informe sobre el Desarrollo y Comportamiento de su Niño o Niña: A

nombre de niño o niña _____ dirección: calle _____
fecha de nacimiento: ____/____/19____ fecha de hoy: ____/____/19____
sexo _____

Estudio hecho por le Health Care Financing Administration (HCFA 500-77-0032)

ciudad _____ nombre de la persona llenado la forma _____

TIRE

Instrucciones: Por favor, permitan conocer el desarrollo, comportamiento y funcionamiento social de su niño o niña. Este no es un exámen. Es una manera en la que Ud. nos pueda explicar algo sobre su niño o niña. Ud. tendrá la oportunidad de conversar sobre cualquiera de estos aspectos y hacer preguntas sobre el desarrollo de su niño o niña.

parentesco del niño o niña con la persona que ha llenado la forma: _____

Tiene usted alguna pregunta o preocupación sobre su niño o niña con respecto a:

	si	no	no estoy segura
altura			
peso			
salud			
alimentación			
descanso, horario de dormir			
que tiempo llora			
habilidad de movimiento (gatear, caminar, correr, etc.)			
uso de las manos (juego con bloques, cuentas, clavija, uso de la cuchara, tenedor, etc.)			
habilidad de ver con claridad			
habilidad de escuchar			
habilidad de prestar atención y entender lo que se le dice a el o ella			
habilidad de comunicarle a usted lo que el/ella quiere (con o sin palabras)			
hablar (palabras, frases)			
habilidad de hablar, de modo que otras personas fuera de la familia puedan comprenderlo/a			
aprender			
dar y llevarse bien con otros			
alimentarse por sí mismo			
vestirse a sí mismo			
puede usar el baño solo o con ayuda			

Por favor marque todas las palabras que parecen describir a su niño: (deje en blanco aquellas que no lo hacen)

lleno de energía _____ muy sensible _____ es fácil de cuidar _____

jugueterón _____ se mece atrás y adelante por mucho tiempo _____ muy pegado a sus padres _____

tímido _____ le gusta pelear _____ le gusta agrandar _____

afectuoso cariñoso _____ añorado _____ es triste _____

curioso _____ de buen temperamento, alegre _____ difícil de manejar _____

muy activo _____ se excita con facilidad _____ tiene poca energía _____

muestra poco interés en la gente _____ mal carácter _____ miedoso-temeroso _____

le gusta ayudar _____ no le gusta obedecer _____ le gusta golpear la cabeza contra la pared o la cama _____ amistoso _____

alguna otra palabra que desee agregar _____

¿Tiene alguna pregunta o preocupación sobre su niño acerca de lo que marco arriba?

si _____ no _____ no estoy segura _____

¿Cuáles son las habilidades de su niño? (cosas especiales, aspectos buenos)

¿Como piensa que su niño se siente sobre si mismo (seguro de si mismo, poca confianza, no se tiene mucha estima, temeroso, etc.)?

¿Como se siente su niño con respecto a otros (niños con quien el o ella juega, familiares, vecinos, maestros, etc.) Es amistoso, poco amistoso, le preocupa como ellos se sienten, etc.?

¿Tiene usted alguna otra pregunta o preocupación que a usted le gustaría consultar con nosotros?

Instrucciones para los padres: Lea cada sección de esta página, por favor en las columnas R al lado de cada función que su niño o niña desarrolló. Cuando Ud. ha marcado todas las funciones que su niño o niña desarrolló, continúe con la sección siguiente. Si su niño o niña tiene más de dos años, Ud. puede comenzar señalando bajo de las marcadas.

nombre del niño o niña

calle

ciudad

fecha de hoy

TEAR HERE

**DESARROLLO GROSSO—
MOTRIZ (MOVIMIENTO)**

	R	O
levanta la cabeza y pecho cuando esta acostado boca abajo		
sostiene su cabeza sin rezagarse cuando lo estira para sentarlo		
rueda de espaldas al pecho		
..		
se sienta solo (erecto y firme) sin apoyo cuando es puesto en posición de sentarse		
se levanta sin ayuda		
..		
gatea con manos y rodillas		
se para solo, bien		
camina con ayuda		
..		
camina solo		
"baila" respondiendo a la musica		
..		
corre bien, se cae raramente		
patea la pelota hacia adelante		
..		
salta (con ambos pies sin tocar el piso)		
maneja un triciclo, usando los pedales (si tiene un triciclo para usar)		
sube y baja las escaleras solo utilizando un pie por escalón		
..		
salta (brinca) sobre un pie, sin ayuda		
puede sostenerse en un pie por más o menos cinco segundos		
brinca en un pie y luego el otro		
..		
brinca en un pie repetidamente, en forma coordinada		
halla habilmente (varia el movimiento en ritmo con la musica)		
buen balance y coordinación en juegos activos		

**DESARROLLO MOTRIZ (MÚSCULOS
PEQUEÑOS)**

	R	O
coloca las manos juntas cuando esta boca arriba		
trata de agarrar objetos cuando esta recostado de espaldas		
trata de agarrar (coger) y sostener un juguete con una mano estando sentado		
..		
recoge objetos con la palma y el pulgar de la mano		
pasa un juguete de una mano a la otra		
..		
levanta y sostiene dos juguetes al mismo tiempo		
levanta objetos pequeños (trocitos de cereal, pasas de uva, etc.) con firme apretón del pulgar y dedos		
..		
amontona dos bloques, latas u objetos similares		
hace garabatos con crayola o lapiz		
..		
construye torres con cuatro bloques, latas u otros objetos similares		
imita marcas con crayola (lineas de arriba, abajo o circulares)		
..		
sostiene la crayola con los dedos (como un adulto)		
maneja juguetes pequeños (cuentas, fichas, etc.) con seguridad		
..		
dibuja (copia) un círculo completo		
dibuja una persona que tiene por lo menos tres partes (ojos, nariz, boca, cuerpo, brazos, manos, piernas, pies, etc.)		
dibuja (copia) una cruz (+)		
..		
dibuja una persona que tiene por lo menos seis partes		
dibuja un cuadro con buenas esquinas		
escribe en letra de molde unas pocas letras		

DESARROLLO DEL LENGUAJE

	R	O
responde a sonidos (parpadea, se sorprende, detiene su actividad, etc.)		
hace sonidos, balbucea, arrulla en responder		
se expresa espontáneamente y para hacer contacto con la gente (contacto social)		
..		
tiene una variedad de sonidos (vocales, combinaciones de consonantes y vocales—"oh", "adios", etc.)		
dice "mamá", "papá", u otros sonidos similares		
..		
localiza (se vuelve) la frente de los sonidos suaves		
dice "mamá", "papá" u otros sonidos similares como nombres de los padres		
entiende "no", "basta", etc. según el tono de voz de los padres		
..		
usa dos palabras como nombres de cosas o actividades ("ve", "come", etc.)		
señala las cosas familiares (botella, taza, perro, etc.)		
señala dos partes de su cuerpo cuando le piden que lo haga		
..		
usa palabras para comunicar lo que desea		
usa oraciones o frases de dos palabras		
apunta ilustraciones de objetos familiares (identifica ilustraciones de objetos)		
sigue direcciones sencillas		
..		
usa pronombres para si y otros (yo, tu, etc.)		
su lenguaje se entiende la mitad del tiempo		
explica el uso de por lo menos dos objetos familiares (pelota, cuchara, etc.)		
..		
cuenta acerca de sus experiencias diarias		
conoce tres colores		
comprende conceptos (grandes, pequeños, etc.)		
comprende dos preposiciones (sobre, en, debajo, etc.)		
cuenta cuatro objetos, responde "¿cuántos?"		
..		
habla en oraciones		
completamente comprensible, con algunos errores de pronunciación		
define palabras familiares de acuerdo a su uso (pelota "para jugar", sombrero "para poner en la cabeza", etc.)		

**AYUDARSE A SI MISMO
(AYUDA PROPIA)**

	R	O
aprende sobre cosas al mirar a su alrededor		
se conforta a si mismo con su dedo en la boca o el chupete (mamila)		
..		
juega con sus manos, agarrandolas		
se alimenta con galletas		
..		
aprende sobre las cosas tocándolas, poniéndolas en la boca, tirando juguetes, etc.		
trata de moverse a través del cuarto para alcanzar juguetes		
sostiene su botella o bebe de una taza		
..		
coopera al vestirse (empujando el pie en el zapato, el brazo en la camisa, etc.)		
se alimenta con cuchara (derramando parte)		
..		
indica lo que quiere señalando, estirando, se o usando palabras		
come con la cuchara, sin tirar mucho		
..		
se pone prendas sencillas (zapatillas, gorra, etc.)		
se lava y seca las manos		
esta entrenado a usar el baño (o basín)		
..		
se lava y seca las manos y la cara		
se peina y cepilla su cabello tan bien como su estilo de peinado le permite		
..		
se viste y se desviste sin ayuda, excepto para amarrar (atar) sus zapatos		

DESARROLLO SOCIO-EMOTIVO

	R	O
responde positivamente cuando es sostenido por sus padres (sonríe, deja de llorar, etc.)		
sonríe espontáneamente		
parece interesado al mirar la cara de su madre		
distingue a la madre de entre otras, le responde a ella intensamente		
..		
inicia contacto social activamente al sonreír y hacer sonidos		
aparta a alguien o algo que el no quiere		
..		
disfruta juegos sociales (a las escondidas dame una mano, adios, adios, etc.)		
expresa con claridad varias emociones (colera, temor, tristeza, placer, etc.)		
no le gusta separarse de sus padres		
..		
disfruta juegos de pelota sencillos (rueda la pelota para adelante y para atras, etc.)		
abrazo a sus padres		
..		
besa cerrando los labios		
imita actividades familiares de adultos (trabajo de casa, etc.)		
"ayuda" en las tareas de la casa (recoge los juguetes, platos, etc.)		
..		
se refiere a si mismo como "yo" o "mi"		
puede decir su nombre y apellido		
juega cerca de otros niños		
a veces actua con compasión hacia otros		
..		
conoce su sexo y el de otros		
juega cooperativamente con otros		
..		
actua la parte que el o ella elige o la parte que otros le piden que haga, en juegos de fantasía		
sigue las reglas simples de los juegos (responderse y buz, simon dice, etc.)		

APPENDIX B

EPSDT INSTRUCTIONS

For Staff Members Who Obtain History, Assess the Child, Discuss Findings With Parent: ON THE YELLOW FORM ONLY, PLEASE COMPLETE THE FOLLOWING: Methods of assessment used (left side)

Note: the distinction is to be made between the use of an informal clinical assessment of development and an assessment instrument such as the Denver, the DIAL, etc.

Category of service provider: carries out the three tasks which are identified (history/interview, assessment of the child's development, discussion of findings with the parent).

Developmental delay/disturbance identified or suspected:

Note: "developmental delay/disturbance" is used in its broadest sense to include any instance of developmental delay or disturbance; such as; delay in achieving motor skills associated with cerebral palsy; speech disturbances associated with deafness; mental retardation associated with Down's syndrome; developmental disturbance associated with autism; disturbance of activity levels; delay in emotional-social development; developmental delay of unknown etiology, etc.

If developmental delay is identified or suspected, please complete the remainder of the YELLOW PAGE ONLY (for tracking purposes). If the child is referred to another facility (or to another department of your facility) for additional diagnostic procedures and/or intervention/treatment, please SEND THE BLUE FORMS to that facility.

If there are questions about the above or about any other aspects of this study please call (collect): Nancy W. Stone, M.D. at 202/659-9115

DEVELOPMENTAL REVIEW REPORT FORM

CODE # _____

Instructions: *Retain* in original provider site file

Child's Name _____

Address: _____

Medicaid # _____

Yo, _____ (_____),
Nombre Domicilio: Calle, Ciudad
De _____
Parentesco al niño o niña Nombre del niño o niña

estoy solicitado a permitir que información sobre el desarrollo del susodicho niño o niña se pueda usar en una investigación (de exámenes tempranos y periódicos y también procedimientos diagnósticos y de tratamiento para evaluar el desarrollo*) para el objeto de continuar a mejorar los servicios disponibles a mi niño o niña y a otros niños. Yo comprendo que el nombre de cada niño y su número de Medicaid se eliminará de las formas de los reportes cuando todas las formas se completarán, para que ningún niño o niña se pueda identificar en ninguna forma incluidas en la investigación. También comprendo que estoy libre a negar mi participación en esta investigación sin temer ningún castigo. Yo doy mi permiso por la información que se pide sobre el desarrollo del susodicho niño o niña que se incluya en esta investigación de procedimientos de evaluar el desarrollo por exámenes tempranos y periódicos y también procedimientos diagnósticos y de tratamiento.

Firma _____ Testigo _____

Fecha _____

*Contract #HCFA-500-77-0032

I, _____ (_____),
Name Address: Street, City
Of _____
Relationship to Child Name of Child

have been asked to permit information about the above named child's development to be used in a field study (Early and Periodic Screening, Diagnosis and Treatment developmental assessment procedures*) for the purpose of continuing to improve the services which are available for my child and for other children. I understand that every child's name and Medicaid number will be removed from the report forms when all forms have been completed; so that, no child can be personally identified on any report forms which are included in this study. I also understand that I am free to refuse to participate in this study without fear of any penalty.

I give my permission for the information requested about the above named child's development to be included in this study of EPSDT developmental assessment procedures.

Signature _____ Witness _____

Date _____

*Contract #HCFA-500-77-0032

TEAR OR CUT HERE

Date of evaluation: _____
month/day/year

CODE # _____

Child's: date of birth: _____ M F _____
month/day/year sex race

Language spoken by child at home: English Spanish Other: _____

SERVICE PROVIDER

Parent
report

SERVICE PROVIDED

Direct observation
of child

Discussion of
development with
parent, recommen-
dations

ASSESSMENT METHODS USED: (Check any that apply)

Clinical evaluation _____
Developmental test (Denver, DIAL, etc.) _____
Developmental Review Procedures _____

Family practitioner _____
Nurse _____
Pediatric nurse practitioner _____
Pediatrician _____
Social Worker _____
Other _____

Developmental delay/disturbance identified or suspected _____

Yes

No

If Yes, _____

Referred to _____

Name of facility

for: further study _____

intervention/Rx _____

Follow-up to be provided in this office _____

Reason for referral or follow-up: _____

EARLY AND PERIODIC SCREENING, DIAGNOSIS AND TREATMENT FOLLOW-UP

Instructions: This page is to be sent to the facility to which the child is referred and *retained* in that facility.

Child's Name _____

Address: _____

Medicaid # _____

This child was referred to you for further evaluation because of the findings obtained from a review of the child's development at

_____. As a part of an evaluation of EPSDT developmental assessments, our facility is gathering information on this child and on other children that we have seen, in order to systematically evaluate the effectiveness of our developmental screening procedures. The results obtained at our facility will be included with those of other facilities in two other states for the purpose of improving EPSDT procedures.

For this child, we ask that you provide us with information concerning the procedures that you have used in your evaluation, your judgement of the child's development, your diagnosis, and your recommendations. No information which personally identifies the child will leave this site (The child's name and Medicaid/clinic numbers will be removed upon receipt of this form from your facility). A self addressed envelope is enclosed. Additional information about this study can be obtained by writing to this referral site.

We thank you for your cooperation and for the time required to complete this form.

I, _____ (_____),
Name Address: Street, City

_____ Of _____
Relationship to Child Name of Child

have been asked to permit information about the above named child's development to be used in a field study (Early and Periodic Screening, Diagnosis and Treatment developmental assessment procedures*) for the purpose of continuing to improve the services which are available for my child and for other children. I understand that every child's name and Medicaid number will be removed from the report forms when all forms have been completed; so that, no child can be personally identified on any report forms which are included in this study. I also understand that I am free to refuse to participate in this study without fear of any penalty.

I give my permission for the information requested about the above named child's development to be included in this study of EPSDT developmental assessment procedures.

Signature _____

Witness _____

Date _____

*Contract #HCFA-500-77-0032

Yo, _____ (_____),
Nombre Domicilio: Calle, Ciudad

_____ De _____
Parentesco al niño o niña Nombre del niño o niña

estoy solicitado a permitir que información sobre el desarrollo del susodicho niño o niña se pueda usar en una investigación (de exámenes tempranos y periódicos y también procedimientos diagnósticos y de tratamiento para evaluar el desarrollo*) para el objeto de continuar a mejorar los servicios disponibles a mi niño o niña y a otros niños. Yo comprendo que el nombre de cada niño y su numero de Medicaid se eliminará de las formas de los reportes cuando todas las formas se completarán, para que ningún niño o niña se pueda identificar en ninguna forma incluidas en la investigación. También comprendo que estoy libre a negar mi participación en esta investigación sin temer ningún castigo. Yo doy mi permiso por la información que se pide sobre el desarrollo del susodicho niño o niña que se incluya en esta investigación de procedimientos de evaluar el desarrollo por exámenes tempranos y periódicos y también procedimientos diagnósticos y de tratamiento.

Firma _____

Testigo _____

Fecha _____

*Contract #HCFA-500-77-0032

APPENDIX C

PARENT'S EVALUATION OF THE CHILD DEVELOPMENT REVIEW

Instructions: *Retain in provider site file*

DATE: _____

Child's Name: _____

Child's Medicaid # _____

TEAR HERE

Relationship to Child _____

Dear parent:

Will you please take a few minutes to answer some questions about the way your child's development was reviewed today.* For each question, please circle the statement that most closely tells what you think. Please circle only one choice for each question and try to answer each question. Feel free to add anything else that you want to say by writing in the space below each question. When you have finished answering the questions, place this form in the box which has been provided for it. Thank you for your help.

- A. How comfortable did you feel about asking questions and talking about anything that concerns you about your child's development?

1	2	3	4	5
Not at all	A little	Somewhat	A good deal	Very much

Comments: _____

- B. How well were your questions and concerns about your child's development listened to and discussed?

1	2	3	4	5
Not at all	A little	Somewhat	A good deal	Very much

Comments: _____

* Procedures for Assessment and Review of Development (HCFA 500-77-0032). This study is being carried out for the Health Care Financing Administration, DHEW.

APPENDIX D

PROFESSIONAL'S EVALUATION OF DEVELOPMENTAL REVIEW

Name: _____ DEGREE: _____ DISCIPLINE: _____

Number of children reviewed by these procedures: _____

You have had the opportunity to utilize the developmental review procedures with a number of children. Your opinions and comments regarding the usefulness of the procedures are essential for our evaluation. Please choose the one response for each question that most accurately reflects your judgement. Please respond to each question. Your written comments and suggestions will be particularly helpful in making revisions to the developmental review processes and procedures. Thank you for your continuing assistance.

A. How much time in minutes, on the average, does it take to complete the Developmental Review?:
Information-gathering _____, Interpretation _____, Parent Feedback _____

B. How much did the Developmental Review process contribute to your knowledge about child development and to your skills in assessing a child's development? (Circle only one choice)

	<u>Not at all</u>	<u>Little</u>	<u>Somewhat</u>	<u>Good deal</u>	<u>Very much</u>
1. GROSS MOTOR					
Knowledge	1	2	3	4	5
Skill	1	2	3	4	5
2. FINE MOTOR					
Knowledge	1	2	3	4	5
Skill	1	2	3	4	5
3. LANGUAGE					
Knowledge	1	2	3	4	5
Skill	1	2	3	4	5
4. SELF-HELP					
Knowledge	1	2	3	4	5
Skill	1	2	3	4	5
5. SOCIAL/EMOTIONAL					
Knowledge	1	2	3	4	5
Skill	1	2	3	4	5

C. How does this Developmental Review process compare to the previous methods you have used to assess the children's development? (Circle only one choice)

Developmental Review vs. _____ (Previous method/s)

	<u>Considerably less</u>	<u>Less</u>	<u>Same</u>	<u>More</u>	<u>Considerably more</u>
1. TIME	1	2	3	3	3
2. PRACTICAL UTILITY	1	2	3	4	5
3. COMPREHENSIVENESS	1	2	3	4	5
4. PARENT ACCEPTANCE	1	2	3	4	5
5. YIELD OF DATA FOR REFERRAL	1	2	3	4	5

Comments: _____

D. Rate each item on a 5-point scale in terms of how useful you have found the procedures to be in the developmental review:

<u>Element</u>	<u>Very Useful</u>	<u>Useful</u>	<u>Questionable</u>	<u>Not very Useful</u>	<u>Useless</u>
1. Parent Report Form	1	2	3	4	5
2. Instructions for Parent Report Form	1	2	3	4	5
3. Parent Interview Form	1	2	3	4	5
4. Instructions for Interview Form	1	2	3	4	5
5. Guidlines for Observation	1	2	3	4	5
6. The Developmental Map	1	2	3	4	5
7. Interpretation Guidelines (Back of Developmental Map and Manual	1	2	3	4	5
8. Decision-Making Guidlines/ Follow-up	1	2	3	4	5
9. Interpretive Interview Guidelines	1	2	3	4	5
10. Developmental Review Process- Overall Effectiveness	1	2	3	4	5

Page 3 - PROFESSIONAL'S EVALUATION OF DEVELOPMENTAL REVIEW

Comments on usefulness of elements:

1. Parent Report Form _____

2. Instructions for Parent Report Form _____

3. Parent Interview Form _____

4. Instructions for Interview Form _____

5. Guidelines for Observation _____

6. The Developmental Map _____

7. Interpretation Guidelines (Back of Developmental Map and Manual) _____

8. Decision-Making Guidelines/Follow-up _____

9. Interpretive Interview Guidelines _____

10. Developmental Review Process-Overall Effectiveness _____

What specific suggestions would you make for improving the Developmental Review process?

APPENDIX E

Ohio Rural Public (Code 212)

Protocol for second part of Field Study (PARD)

Staff:

One or two nurses who have had experiences in carrying out developmental assessments for children under the age of 5 years.

Speech pathology staff of the Speech and Hearing Clinic.

Subjects:

Candidates for EPSDT assessments who are under the age of 5 years and whose parents consent to their inclusion in this study.

The number will be determined in part by the case loads at the clinic during the period of the study (March, April, May, June), the minimum number to be 50, the preferred number, 100.

Procedures:

1. Nursing staff will familiarize themselves with the procedures which are to be field tested, as described in the Procedural Chart and the Manual.
2. Nursing staff will use the procedures which are to be field tested in providing a developmental assessment for each child who is included in the study. Forms A and B, the yellow tracking forms, and the parent questionnaires (green) will be completed on each child at this time.
3. Each child will receive the standard assessment of the Speech and Hearing Clinic, this assessment to be carried out by the professional staff of the Speech and Hearing Clinic, with the findings to be recorded on the forms currently in use in the Clinic and on the blue field study forms.
4. In order to minimize the effects of the order in which assessments are done, children will be seen first in the Speech and Hearing Clinic and first by the Nursing staff on alternate weeks.

5. Staff of the Speech and Hearing Clinic and Nursing staff participating in the field study will not discuss either their findings on specific children or the percentage of children who are found to be in need of additional assessments or intervention. Records of the findings in the two assessments will be stored in separate parts of the hospital until the conclusion of the study.
6. At the conclusion of the study, comparisons of the findings from the two approaches to assessment will be made, both on site and in the context of the larger field study which is being carried out in other sites, also.
7. In the event that any of the children who are included in this part of the field study are referred to sites outside of the hospital for additional assessments and/or intervention, staff of these sites will be requested to complete a second blue field study form on each child who is referred.

APPENDIX F

INSTRUMENT MATRIX

NAME OF INSTRUMENT	INITIAL INVESTMENT	ADMINIS-TRATION		ADMINIS-TRATOR		AGE-RANGE	TESTING TIME	TYPE OF RESPONSE			CONTENT AREAS							
		Individual	Group	Professional	Non-professional			Verbal	Non-verbal	Rater	Social/Emotional Development	Language/Cognitive Development	Speech and Articulation	Fine Motor Development	Gross Motor Development	Visual Reception	Auditory Reception	Self-Help Skills
The ABC Inventory	\$ 5.90	X		X		3-6 yr to 6-6 yr	9 min	X	X			X		X				
Adaptive Behavior Scales	\$ 7.00	X	X	X	X	3-0 yr to adult	20 min			X	X							
American School Reading Readiness Test	\$ 5.90	X	X	X		5-0 yr to 6-0 yr	30 min					X		X		X		
Anton Brenner Developmental Gestalt Test of School Readiness	\$ 13.50	X		X		5-0 yr to 6-0 yr	5 min	X				X		X				
Arizona Articulation Proficiency Scale: Revised	\$ 18.50	X		X	X	3-0 yr to adult	25 min	X					X					
Assessment Program of Early Learning Levels (APELL)	\$302.35*		X	X		4-6 yr to 7-0 yr	40 min		X			X						
Bankson Language Screening Test	\$ 14.95	X		X		4-1 yr to 8-0 yr	25 min	X	X			X				X	X	
Basic Concept Inventory	\$ 30.00	X		X		3-0 yr to 10-0 yr	20 min	X	X			X						
Basic School Skills Inventory	\$ 12.00	X		X		4-0 yr to 7-0 yr	20 min	X	X		X	X		X				X
Bayley Scales of Infant Development	\$ 98.00	X		X		2 mo to 2-6 yr	45 min		X		X	X			X	X	X	
Bender Motor Gestalt Test	\$ 2.50*	X	X			4-0 yr to 12-0 yr	10 min		X					X				
Birth-Three Scale		X			X	1 mo to 3-0 yr		X	X		X	X		X	X			
Boehm Test of Basic Concepts	\$ 7.75	X	X	X		4-0 yr to 8-0 yr	30 min		X	X		X						
Boyd Developmental Progress Scale	\$ 12.00	X		X		1 mo to 8-0 yr		X	X	X		X		X	X			X
Burks Behavior Rating Scale	\$ 3.85*	X		X	X	6-0 yr to 12-0 yr	10 min			X	X					X		
Cain-Levine Social Competency Scale	\$ 6.00	X		X		5-0 yr to 13-0 yr	15 min			X	X	X		X				X
Camelot Behavioral Checklist		X		X			25 min			X	X							

INSTRUMENT MATRIX

NAME OF INSTRUMENT	INITIAL INVESTMENT	ADMINIS-TRATION		'ADMINIS-TRATOR		AGE-RANGE	TESTING TIME	TYPE OF RESPONSE			CONTENT AREAS								
		Individual	Group		Professional	Non-professional			Verbal	Non-verbal	Rater	Social/Emotional Development	Language/Cognitive Development	Speech and Articulation	Fine Motor Development	Gross Motor Development	Visual Reception	Auditory Reception	Self-Help Skills
Carolina Developmental Profile		X			X		2-0 yr to 5-0 yr		X	X		X	X		X	X			
Carrow Elicited Language Inventory	\$ 39.95	X			X		3-0 yr to 7-11 yr	45 min	X				X						
CCD Developmental Progress Scale	\$ 12.00*	X			X	X	1 mo to 8-0 yr	15 min			X	X	X		X	X			X
Child Behavior Rating Scale	\$ 7.50	X			X	X	5-0 yr to 8-0 yr	8 min			X	X							
Children's Self-Social Construct Tests - Preschool Level	\$ 8.00	X			X		3-0 yr to 8-0 yr	10 min		X		X							
Cincinnati Autonomy Test Battery		X			X		3-0 yr to 6-0 yr	60 min		X	X	X							
Circus	\$ 63.00		X		X		4-0 yr to 6-0 yr			X	X		X		X		X	X	
Cognitive Skills Assessment Battery	\$ 17.50	X			X	X	3-0 yr to 6-0 yr	25 min	X	X			X		X	X	X	X	
Columbia Mental Maturity Scale	\$ 50.00*	X			X		3-6 yr to 10-0 yr	18 min		X			X						
Communicative Evaluation Chart from Infancy to Five Years	\$.25	X			X	X	3 mo to 5-0 yr	30 min	X	X	X		X		X	X	X	X	
Comprehensive Identification Process (CIP)	\$ 59.95	X			X	X	2-6 yr to 5-6 yr	30 min	X	X		X	X	X	X				
Contemporary School Readiness Test	\$ 1.50		X		X		5-0 yr to 6-6 yr	105 min	X	X			X				X	X	
Cooperative Preschool Inventory	\$ 5.50	X			X	X	3-0 yr to 6-0 yr	20 min	X	X			X		X			X	
Dailey Language Facility Test	\$ 15.00*	X			X		3-0 yr to 17-0 yr	15 min	X				X	X					X
Del Rio Language Screening Test	\$ 9.00	X			X		3-0 yr to 6-11 yr		X	X			X						
Denver Articulation Screening Exam (DASE)	\$ 6.85	X			X		2-6 yr to 7-0 yr	5 min	X						X				
Denver Developmental Screening Test	\$ 25.00	X			X	X	1 mo to 6-0 yr	20 min	X	X	X	X	X		X	X			

INSTRUMENT MATRIX

NAME OF INSTRUMENT	INITIAL INVESTMENT	ADMINISTRATION		ADMINISTRATOR	AGE-RANGE	TESTING TIME	TYPE OF RESPONSE		CONTENT AREAS							
		Individual	Group				Verbal	Non-verbal								
Denver Prescreening Developmental Questionnaire	\$ 15.00	X			3 mo to 6-0 yr	10 min			X	X			X	X		
Detroit Tests of Learning Aptitude	\$ 20.15	X		X	3-0 yr to adult	75 min	X	X		X	X		X	X	X	X
Developmental Guidelines		X		X	3-0 yr to 6-0 yr				X	X			X	X		X
Developmental Indicator for the Assessment of Learning (DIAL)	\$ 99.50	X		X	2-6 yr to 5-6 yr	30 min	X	X	X	X	X		X	X		
Developmental Key for Assessing Children's Growth		X		X	3-0 yr to 6-0 yr	15 min		X	X	X	X		X	X		
Developmental Profile	\$ 11.30	X		X	6 mo to 12-0 yr	30 min			X	X	X		X	X		X
Developmental Screening Inventory (DSI)	\$ 4.50	X			1 mo to 1-6 yr	15 min			X	X	X		X	X		
Developmental Test of Visual Motor Interpretation	\$ 36.00	X	X	X	2-0 yr to 15-0 yr	10 min		X					X		X	
Developmental Test of Visual Perception	\$ 10.00	X	X	X	3-0 yr to 8-0 yr	45 min		X					X		X	
Early Childhood Assessment: A Criterion-Referenced Screening Device	\$ 8.00	X		X	3-6 yr to 7-0 yr	50 min	X	X					X	X	X	X
Early Detection Inventory	\$ 8.25*	X		X	3-0 yr to 6-0 yr	35 min	X	X					X	X		
Early Education Screening Test - Battery of Basic Skills Development		X		X	4-0 yr to 6-0 yr	30 min	X	X					X	X	X	X
Early Identification Screening Inventory	\$ 8.50	X		X	5-0 yr to adult				X	X			X	X	X	
The Educational Developmental Program, Kit I	\$ 89.95	X		X	4-0 yr to 7-0 yr		X	X					X	X	X	X
Flitot-Pearson Screening Inventory		X		X	4-0 yr to 6-0 yr	15 min	X	X	X				X	X	X	

INSTRUMENT MATRIX

NAME OF INSTRUMENT	INITIAL INVESTMENT	ADMINISTRATION		ADMINISTRATOR	AGE-RANGE	TESTING TIME	TYPE OF RESPONSE		CONTENT AREAS								
		Individual	Group	Professional	Non-professional		Verbal	Non-verbal	Rater	Social/Emotional Development	Language/Cognitive Development	Speech and Articulation	Fine Motor Development	Gross Motor Development	Visual Reception	Auditory Reception	Self-Help Skills
Evanson Early Identification Scale	\$ 3.09*	X		X		5-0 yr to 6-3 yr	20 min	X		X			X		X		
Fairview Behavior Evaluation Battery for the Mentally Retarded	\$ 52.00	X		X	X	1 mo to 10-0 yr	15 min	X		X	X						X
First Grade Screening Test (FGST)	\$ 14.50		X	X		4-6 yr to 6-0 yr	38 min	X		X	X		X				
A General Screening Instrument.		X		X					X	X	X						
Gessell Developmental Examination	\$ 12.50	X		X		5-0 yr to 10-0 yr	30 min	X		X	X		X	X	X		
Gessell Developmental Schedules		X		X		1 mo to 6-0 yr			X	X	X		X	X			
Goldman-Fristoe-Woodcock Auditory Skills Test Battery	\$ 23.00	X		X		3-8 yr to adult	15 min	X								X	
Goodenough Harris Drawing Test	\$ 5.75*	X	X	X		3-0 yr to 15-0 yr	13 min	X		X	X		X				
Harris Tests of Lateral Dominance	\$ 8.40	X		X		7-0 yr to adult	15 min	X					X	X			
Houston Test for Language Development	\$ 35.00*	X		X		6 mo to 6-0 yr	30 min	X	X								
Infant Behavior Inventory		X		X		1-0 yr to 3-0 yr	25 min		X	X		X					
Infant Intelligence Scale	\$119.00	X		X		3 mo to 2-6 yr	30 min	X	X								
Initial Screening Checklist	\$.15	X		X		6-0 yr to 14-0 yr			X		X						
Inter-American Services: Test of General Ability, Preschool Level	\$ 6.00	X		X		4-0 yr to 5-0 yr	45 min	X			X						
Inventory for Language Abilities		X		X		4-0 yr to 8-0 yr			X		X				X	X	
Inventory of Readiness Skills	\$ 10.95	X		X		3-0 yr to 7-0 yr	20 min	X	X		X				X	X	
Jansky Screening Index	\$ 16.50	X		X	X	5-0 yr to 6-0 yr	20 min	X	X		X		X		X	X	

INSTRUMENT MATRIX

NAME OF INSTRUMENT	INITIAL INVESTMENT	ADMINISTRATION		ADMINISTRATOR		AGE-RANGE	TESTING TIME	TYPE OF RESPONSE			CONTENT AREAS							
		Individual	Group	Professional	Non-professional			Verbal	Non-verbal	Rater	Social/Emotional Development	Language/Cognitive Development	Speech and Articulation	Fine Motor Development	Gross Motor Development	Visual Reception	Auditory Reception	Self-Help Skills
Motor Free Visual Perception Test	\$ 17.50	X		X		4-0 yr to 8-0 yr	10 min		X							X		
Motor Problems Inventory	\$ 9.50	X		X		3-0 yr to 11-0 yr	10 min		X					X	X			
Move-Grow-Learn (Movement Skills Survey)	\$ 17.28	X		X		3-0 yr to 9-0 yr			X					X	X			
Northwestern Syntax Screening Test	\$ 10.00	X		X		3-0 yr to 8-0 yr	20 min	X	X			X						
Oseretsky Test of Motor Proficiency	\$ 35.00	X		X		4-0 yr to 16-0 yr	25 min		X					X	X			
Parent Readiness Evaluation of Preschoolers (PREP)	\$ 2.40	X			X	4-0 yr to 6-0 yr	45 min	X	X			X		X	X	X	X	
Photo Articulation Test	\$ 14.75	X		X		3-0 yr to 12-0 yr	5 min	X					X					
Piers-Harris Children's Self Concept Scale	\$ 2.25*	X	X	X		7-0 yr to 17-0 yr	20 min	X			X							
Pre-Academic Learning Inventory	\$ 16.50	X		X		4-6 yr to 6-0 yr	35 min	X	X			X	X	X	X	X	X	
Pre-Reading Screening Test of Articulation	\$ 1.00	X		X		5-0 yr to 6-0 yr	8 min	X					X					
Preprimary Profile (Introduction to my Child)	\$ 11.00*	X		X	X	3-0 yr to 6-0 yr	15 min			X	X	X						X
Pre-Reading Screening Procedures	\$ 14.50	X	X	X		5-0 yr to 6-0 yr			X			X		X		X	X	
Pre-School Attainment Record	\$ 4.50	X		X	X	6 mo to 7-0 yr	30 min			X	X	X		X	X			
Preschool Behavior Questionnaire: Manual and Questionnaire Set	\$ 4.00	X		X		3-0 yr to 6-0 yr	10 min			X	X							
Preschool Language Scale	\$ 15.00	X		X		1-6 yr to 7-0 yr	30 min	X	X			X	X				X	
Preschool Screening Survey	\$ 20.00	X		X		3-5 yr to 6-6 yr	30 min	X	X			X		X	X	X		
Preschool Screening System	\$ 16.00	X	X	X	X	3-0 yr to 5-4 yr	15 min	X	X	X	X	X		X	X	X		

INSTRUMENT MATRIX

NAME OF INSTRUMENT		INITIAL INVESTMENT	ADMINIS-TRATION		ADMINIS-TRATOR	AGE-RANGE	TESTING TIME	TYPE OF RESPONSE			CONTENT AREAS								
			Individual	Group	Professional	Non-professional			Verbal	Non-verbal	Rater	Social/Emotional Development	Language/Cognitive Development	Speech and Articulation	Fine Motor Development	Gross Motor Development	Visual Reception	Auditory Reception	Self-Help Skills
Primary Academic Sentiment Scale		\$ 29.00		X	X		4-4 yr to 7-3 yr	50 min		X		X							
Primary Self-Concept Inventory		\$ 10.10	X	X	X		4-0 yr to 10-0 yr	15 min		X		X							
Progress Assessment Charts of Social Development		\$ 7.50*	X		X	X		15 min			X	X							X
Purdue Perceptual Motor Survey		\$ 16.45	X		X		6-0 yr to 10-0 yr	60 min		X					X				
Quick Neurological Screening Test		\$ 12.00	X	X	X		4-0 yr to 18-0 yr	20 min			X	X			X	X	X	X	
Quick Screening Scale of Mental Development		\$ 2.00	X		X		6 mo to 10-0 yr	30 min						X	X	X		X	
Quick Test		\$ 16.00	X		X		2-0 yr to adult	7 min	X										
Quick Word Test		\$ 1.50					9-0 yr to adult	18 min			X								
Rapid Developmental Screening Checklist			X		X		1 mo to 5-0 yr	15 min			X	X		X	X				
Receptive-Expressive Emergent Scale (REEL)		\$ 16.50	X		X		1 mo to 3-0 yr	25 min			X			X					
Reynell Developmental Language Scales		\$ 60.00	X				1-0 yr to 5-0 yr		X	X				X					
Riley Articulation and Language Test		\$ 7.50	X		X		4-0 yr to 7-0 yr	2 min	X					X					
Riley Preschool Development Screening Inventory		\$ 7.50	X		X		3-0 yr to 6-0 yr	10 min			X	X			X				
Rosner Perceptual Survey			X		X		6-0 yr to 10-0 yr	30 min	X	X					X	X	X	X	
Rosner-Richman Perceptual Survey			X		X		6-0 yr to 10-0 yr	15 min		X					X	X	X	X	
School Entrance Checklist		\$ 1.75	X			X	4-0 yr to 5-0 yr	15 min			X	X							
School Readiness Checklist - Ready or Not		\$ 4.95	X		X		4-0 yr to 5-0 yr	15 min			X	X	X		X	X	X		

INSTRUMENT MATRIX

NAME OF INSTRUMENT	INITIAL INVESTMENT	ADMINISTRATION		ADMINISTRATOR	AGE-RANGE	TESTING TIME	TYPE OF RESPONSE			CONTENT AREAS									
		Individual	Group	Professional	Non-professional		Verbal	Non-verbal	Rater	Social/Emotional Development	Language/Cognitive Development	Speech and Articulation	Fine Motor Development	Gross Motor Development	Visual Reception	Auditory Reception	Self-Help Skills		
School Readiness Survey	\$ 1.00	X			X	4-0 yr to 6-0 yr	25 min	X	X	X	X								
Screening Test of Academic Readiness (STAR)	\$ 29.00		X	X	X	4-0 yr to 6-5 yr	60 min		X		X		X						
Screening Test for the Assignment of Remedial Treatment (START)	\$ 29.00		X	X	X	4-6 yr to 6-5 yr	60 min		X						X	X	X		
Screening Test for Auditory Comprehension of Language	\$ 4.75		X	X		3-0 yr to 6-0 yr	25 min		X		X								
Sequenced Inventory of Communication Development	\$ 95.00*	X		X		4 mo to 4-0 yr	45 min	X	X	X	X	X							
Slingerland Screening Tests for Identifying Children with Specific Language Disability	\$ 29.80	X	X	X		5-0 yr to 12-0 yr			X		X		X		X	X			
Southern California Perceptual-Motor Tests	\$ 15.50	X		X		4-0 yr to 8-0 yr	20 min	X	X										
Specific Language Disability Test	\$ 3.75	X	X	X		11-0 yr to 14-0 yr		X	X		X		X		X	X			
Sprigle School Readiness Screening Test	\$ 18.00	X		X		4-6 yr to 6-9 yr	15 min		X		X								
The TARC Assessment System	\$ 5.95	X		X	X	3-0 yr to 16-0 yr				X	X		X						X
Templin-Darley Tests of Articulation	\$ 5.75	X		X		3-0 yr to 8-0 yr	10 min	X											
Tests of Basic Experiences	\$ 88.00		X	X		3-0 yr to 7-0 yr	25 min		X		X								
Test of Nonverbal Auditory Discrimination (TENVAD)	\$ 11.75	X	X	X		5-0 yr to 8-0 yr	15 min		X								X		
Utah Test of Language Development	\$ 25.00	X		X		9 mo to 16-0 yr	35 min	X	X			X							

INSTRUMENT MATRIX

NAME OF INSTRUMENT	INITIAL INVESTMENT	ADMINISTRATION		ADMINISTRATOR		AGE-RANGE	TESTING TIME	TYPE OF RESPONSE			CONTENT AREAS							
		Individual	Group	Professional	Non-professional			Verbal	Non-verbal	Rater	Social/Emotional Development	Language/Cognitive Development	Speech and Articulation	Fine Motor Development	Gross Motor Development	Visual Reception	Auditory Reception	Self-Help Skills
Vane Kindergarten Test	\$ 7.50	X	X	X		4-0 yr to 6-11 yr	30 min	X	X		X	X		X		X		
Verbal Language Development Scale	\$ 3.25	X		X		1 mo to 16-0 yr	30 min			X		X						
Vineland Social Maturity Scale	\$ 4.80	X		X	X	1 mo to adult	25 min			X	X	X						X
Visual Analysis Test	\$ 1.00	X		X		5-0 yr to 7-0 yr			X					X		X		
Walker Problem Behavior Identification Checklist	\$ 9.50	X		X		9-0 yr to 12-0 yr	2 min			X	X							
Wepman Auditory Discrimination Tests	\$ 8.50*	X		X		5-0 yr to 8-0 yr	15 min	X	X								X	
Winterhaven Perceptual Forms Test		X	X	X	X	4-0 yr to 9-0 yr	4 min		X					X				
Yellow Brick Road	\$ 39.95	X	X	X	X	5-0 yr to 6-0 yr	45 min	X	X			X		X	X	X	X	

DISSEMINATION

DISSEMINATION

The Project Director met with members of INTER-ACT: The National Committee for Very Young Handicapped Children and Their Families on two occasions, serving in both instances as a resource person with respect to EPSDT developmental assessment activities.

Both the Field Study site visits and the Conference on Continuing Education Issues also were in part dissemination activities, in that they provided an opportunity to convey information and discuss EPSDT with a number of professionals.

As recommended by participants at the FY '79 Conference on Continuing Education Activities, the Report of the Conference will be disseminated widely. A list of the categories of professionals to whom it will be sent follows:

Ambulatory Pediatrics Association

American Academy of Child Practice

American Academy of Family Practice

American Academy of Pediatrics

American Medical Association

Council of Mental Health

American Nurses Association

Division of Maternal and Child Health

Community Nursing

Psychiatric Nursing

Council of Primary Care

American Occupational Therapy Association
American Physical Therapy Association
American Psychiatric Association
American Psychological Association
American Public Health Association
Association of Maternal and Child Health
Crippled Children's Directors
Chairman, Department of Child Psychiatry in
state and private medical schools
Deans of Department of Pediatrics in state and
private medical schools
Deans, Schools of Nursing
Directors, AAPSC Member Services
Directors of Development and state health offices
Directors, State Developmental Disabilities programs
EPSDT conference participants, 1977, 1978, & 1979
Members, General Pediatric Academic Development Program
National Advisory Council on Nursing Training
National Association of Pediatric Nurse
Associates and Practitioners
National Medical Association
State Directors of Crippled Children's Services
State & Territorial Health Officers
The Council for Exceptional Children
Training Directors in Child Psychiatry Associated
with AAPSC member services
University Affiliated Facilities Interdisciplinary
Council

CONCLUSION

CONCLUSION

This document marks the termination of a three year effort to develop recommendations regarding the developmental assessment component of the EPSDT Program. The complexities of the issues which have been covered in the body of this report and in previous reports submitted to the Health Care Financing Administration do not lend themselves to brief summaries. Major points which have been covered include the early recommendation of a shift in focus from that of searching for "defects" to that of providing services to support the development of all of the children who eligible for the program. An articulation of the elements of a developmental review and a field study of these elements, or procedures, has followed. This is covered in the field study report which is a part of this final report. Another major effort has addressed training needs of professionals who provide developmental assessment services to children in the EPSDT Program. Both pre-service and continuing education training needs have been reviewed and recommendations made concerning both. Particular attention has been paid to continuing education, and a report of related recommendations also is included in this report. A final task has been that of dissemination of information concerning the EPSDT Program.

This project is an expression of the concerns of many professionals from the large number of disciplines who provide services for young

children. The EPSDT Program is seen as having the potential of providing needed services to a large underserved population. It is hoped that the recommendations which have been made as an outcome of the AAPSC project will help to keep the focus on the needs of these children and to facilitate the delivery of services to them.

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